

Costs of and public funds for Natura 2000 in the Netherlands



Costs of and public funds for Natura 2000 in the Netherlands

Hans Leneman

Marc-Jeroen Bogaardt

Pim Roza

Report 2009-073

October 2009

Project 21240

LEI Wageningen UR, The Hague

LEI Wageningen UR conducts research in the following areas:

-  International policy
-  Development issues
-  Consumers and supply chains
-  Sectors and enterprises
-  Environment, nature and landscape
-  Rural economy and use of space

This report is part of the research area Environment, nature and landscape.



This research has been financed by Vogelbescherming Nederland (Netherlands Society for the Protection of Birds, VBN).

Photo's: Kina/ Geurt Besselink and Agami/ Rein Hofman

Costs of and public funds for Natura 2000 in the Netherlands

Leneman, H., M.J. Bogaardt and P. Roza

Report 2009-073

ISBN/EAN: 978-90-8615-363-3

Price € 15,25 (including 6% VAT)

53 p., fig., tab.

This report offers an estimate of the costs of maintaining or restoring the Natura-2000 network to a favourable status in the Netherlands. Also, an assessment is made of how many financial resources are potentially available to cover these costs from European funds, Dutch State funds and Dutch provincial funds.

The total funding needed for the period from 2007-2020 is in the range between €1.9 and €2.3bn. The Netherlands has the possibility to cover part of these costs by using several European Funds, in combination with State and Provincial funding. Some €1.0bn will be available from these funding sources from 2007-2013.

Dit rapport geeft een schatting van de kosten die gemoeid zijn met het in gunstige staat van instandhouding brengen en houden van de Natura 2000-gebieden in Nederland. Daarnaast wordt ingeschat hoeveel geld mogelijk beschikbaar is vanuit Europese, nationale en provinciale overheidsmiddelen om deze kosten te dekken.

In de periode van 2007 tot 2020 zullen de kosten naar schatting €1,9-2,3 miljard bedragen. Nederland kan deze kosten dekken door gebruik te maken van enkele Europese fondsen, in combinatie met rijks- en provinciale gelden. Van 2007 tot 2013 is naar schatting €1,0 miljard uit deze financieringsbronnen beschikbaar.

Orders

+31.70-3358330

publicatie.lei@wur.nl

© LEI, 2009

Reproduction of contents, either whole or in part, permitted with due reference to the source.



LEI is ISO 9000 certified.

Content

	Preface	5
	Summary	6
	Samenvatting	7
1	Introduction	8
2	Costs of Natura 2000	13
	2.1 Introduction and methodological remarks	13
	2.2 Funding needs 2007-2020	14
	2.3 Summary	17
3	European Funds for Natura 2000	19
	3.1 Introduction and general methodology	19
	3.2 European Agricultural Fund for Rural Development	20
	3.3 LIFE+	24
	3.4 European Regional Development Fund	25
	3.5 Summary	29
4	State funds for Natura 2000	30
	4.1 Introduction and methodology	30
	4.2 Ministry of Agriculture, Nature and Food Quality (ANF)	31
	4.3 Ministry of Housing, Spatial Planning and the Environment (HSE)	33
	4.4 Ministry of Transport, Public Works and Water Management (TPW).	33
	4.5 Summary	34
5	Provincial funds for Natura 2000	35
	5.1 Introduction and methodology	35
	5.2 Provincial funding through ILG	35
	5.3 Additional State funding	39
	5.4 Summary	40
6	Concluding remarks	42
	References, bibliography and websites	45

Preface

The Birds and Habitat directives constitute the backbone of the European policy on biodiversity protection. As one of the results of these directives, the Natura-2000 network, a large network of protected areas, is being realised. In the Netherlands, 162 Natura-2000 areas have been specified. This report presents an overview on costs of measures in order to maintain or restore the Natura-2000 network in the Netherlands to a favourable status. Furthermore, it elaborates potentially available financial resources, which could cover part of these costs. In addition to insights into these costs and financial resources, this report can be helpful to identify opportunities to finance necessary measures in or close to Natura-2000 areas.

We would like to thank Aris Gaaff (LEI Wageningen UR) for his advice on the analysis of government budgets. We would also like to thank Zoltan Walicky and Paul Morling (Birdlife/RSPB), Irene Bouwma (Alterra Wageningen UR), Patrick Nuveltstijn and Fen van Rossum (Natuurmonumenten), Sandra Bakker and Jap Bing (Staatsbosbeheer), Frits Backer (Stichting Natuur & Milieu) and Bernd de Bruin (Vogelbescherming Nederland) for their comments on earlier versions of this report. Last but not least, we thank Harm Schoten en Astrid Doesburg (both Vogelbescherming Nederland) for their clarifying questions and inspiring discussions.



Prof Dr R.B.M. Huirne
Director General LEI Wageningen UR

Summary

The Netherlands has informed the European Commission that it will designate a total of 162 Natura-2000 areas. These areas with specific habitat types as well as specific plant and animal species cover a surface of about 1.1m ha. Two third of this surface is open water and the Dutch Coastal zone. The Royal Society for the Protection of Birds (RSPB) and Birdlife (European Division) are analysing the needs and EU Funding availability for Natura 2000. On their behalf, Vogelbescherming Nederland has asked LEI Wageningen UR to estimate the costs of maintaining or restoring the Natura-2000 network to a favourable status in the Netherlands. Also, an assessment is made of how many financial resources are potentially available from EU funds, Dutch State funds and provincial funds.

This research project was conducted in the period September 2008 to February 2009. The information was gathered by desk research, based on public data and policy documents.

The total funding need from 2007-2020 amounts to €1.9-2.3bn. Roughly 20% of these costs are aimed at management of Nature-2000 areas, whereas the other costs are mainly aimed at achieving the required environmental quality for a favourable status of Natura-2000 sites. Of all costs, some €1.7bn will be needed for the period 2007-2015. The figures presented could be an underestimation, as recent information indicates that additional measures might be needed.

The Netherlands has the possibility to cover part of these costs by using several European Funds, in combination with State and Provincial funding. We estimate that from 2007-2013 some €1.0bn will be available from these funding sources. About €100m could be available from EU funds, some €400m from State funds and some €50m from Provincial funding.

Samenvatting

Kosten van en publieke gelden voor Natura 2000 in Nederland

Nederland heeft in totaal 162 Natura 2000-gebieden met specifieke habitattypen en specifieke flora- en faunasoorten bij de Europese Commissie aangemeld. Daarmee beslaat Natura 2000 in ons land ongeveer 1,1m ha natuur, waarvan twee derde open water en de kustzone. De Royal Society for the Protection of Birds (RSPB) en Birdlife (European Division) voeren een studie uit naar de kosten en beschikbare Europese fondsen voor de realisatie van deze Natura 2000-gebieden. Namens hen heeft Vogelbescherming Nederland aan LEI Wageningen UR gevraagd een schatting te geven van de kosten van behoud en herstel van de Natura 2000-gebieden in Nederland, zodat deze gebieden in een gunstige staat van instandhouding worden gebracht en gehouden. Bovendien is een analyse gemaakt van de voor dit doel beschikbare middelen uit de Europese Unie, de nationale overheid en de provincies van Nederland. Het onderzoek is uitgevoerd van september 2008 tot februari 2009. De informatie in dit rapport is via desk research verkregen, waarbij gepubliceerde gegevens en beleidsdocumenten als uitgangpunt hebben gediend.

De totale kosten voor het in een gunstige staat van instandhouding brengen van de Natura 2000-gebieden in ons land bedragen in de periode 2007-2020 naar schatting in totaal €1,9-2,3 miljard. Ruwweg 20% hiervan bestaat uit kosten voor het beheer van de Natura 2000-gebieden, de overige kosten moeten worden gemaakt om de milieukwaliteit van deze gebieden, als voorwaarde voor een gunstige staat van instandhouding, te verbeteren. Ongeveer €1,7 miljard van deze kosten kan aan de periode 2007-2015 worden toegerekend. De gepresenteerde kosten kunnen een onderschatting van de werkelijke kosten zijn, aangezien recente informatie wijst op de noodzaak van aanvullende maatregelen.

Nederland heeft de mogelijkheid een deel van deze kosten te financieren uit enkele Europese fondsen, Rijksmiddelen en provinciale middelen. We schatten in dat in de periode 2007 tot 2013 totaal ongeveer €100 miljoen uit Europese fondsen beschikbaar kan komen en rond €400 miljoen uit Rijksmiddelen. Provinciale middelen kunnen in deze periode voor ruim €500 miljoen bedragen aan Natura 2000.

1 Introduction

The Netherlands has specified 162 Natura-2000 areas with habitat types and specific species of flora and fauna. The Birds and Habitats Directives areas together make up the Natura-2000 areas. In the framework of the Birds Directive, 79 areas have been designated in the Netherlands, with a total area of 1,010,910ha. The Netherlands has registered 141 Habitat Directive areas (750,841ha) with the European Commission. Due to overlap of Birds Directive and Habitats Directive areas, Natura 2000 consists in total of some 1.1m ha, of which two thirds is open water and coastal waters.

The Natura-2000 areas either need to be brought up to or kept in 'a favourable status'. Eighty-eight percent of the protected areas does not have a favourable status yet (Ministerie van LNV, 2008b).

The Netherlands has informed the European Commission that it will designate 162 Natura-2000 areas. The procedure in the Netherlands is as follows. First, areas are designated on an interim basis. This interim designation provides the opportunity for society to comment on. Taking these comments into consideration, the designation is finalised. Afterwards, management plans have to be formulated within 3 years after final designation.

Provinces, which are responsible for the formulation of 101 management plans, have put forward objections against the abovementioned procedure. Therefore, the Minister of Agriculture, Nature and Food Quality has decided that final designation of those areas, where provinces are responsible for management plans, will be postponed. Provinces must have completed management plans before September 2009, and afterwards the final designation will be started. Completion of designation is to be expected in December 2010.

Management plans will describe the measures which are necessary to realise the conservation objectives. Furthermore, they aim to provide a global assessment of the costs of these measures and in what way they are financed. These results are not available yet.

The Royal Society for the Protection of Birds (RSPB) and Birdlife (European Division) are analysing the needs and EU Funding availability for Natura 2000 (RSPB, 2007). With the results of this analysis RSPB and Birdlife inform their policy advocacy work on each of the funding instruments available for this policy

area during the budget period 2007-2013. The budget review, required as part of the Financial Perspectives adopted by the EU Council of Ministers agreement in December 2005, is expected to take the first steps to implement a fundamentally reshaped EU budget from 2014 onwards, following the conclusion of the current multi-annual financial framework. Vogelbescherming Nederland is commissioned by RSPB to contribute to the analysis, with respect to Natura 2000 in the Netherlands.

Therefore, Vogelbescherming Nederland has asked LEI Wageningen UR to

1. estimate the costs of maintaining or restoring the Natura-2000 network to a favourable status in the Netherlands;
2. assess how many financial resources are potentially available from the various EU funds for such purposes; the funds to be studied are the European Agricultural Fund for Rural Development (EAFRD), the European Regional Development Fund (ERDF), the Cohesion Fund (CF), the European Social Fund and LIFE+;
3. assess how many financial resources are potentially available from State and Provincial funds aimed at maintaining or restoring the Natura-2000 network to a favourable status;
4. assess how many financial resources are actually allocated to the Natura-2000 network by the Dutch authorities.

Within the definition of this study, costs for Natura 2000 and available funds dominate. We do not pay attention to the potential social and economic benefits of Natura 2000.

Benefits of Natura 2000

This study focuses on costs and funding of Natura 2000 in the Netherlands. We do not look at the benefits, expressed in financial or in other units. Kuik et al. (2006) did make an assessment of the benefits of Natura 2000. Based on a extensive literature review they concluded that the contribution of Dutch nature to our society is some €4,000 gross per hectare. Valuable functions of nature are recreation and environmental regulation (for instance water quantity, water quality and protection against flooding). Nature is also important being an everyday surroundings and as a source of base material. Nature has also non-use value, Dutch population appreciates the presence of nature. The 1,1m-ha Natura-2000 area adds up to an annual gross contribution of €4,5bn.

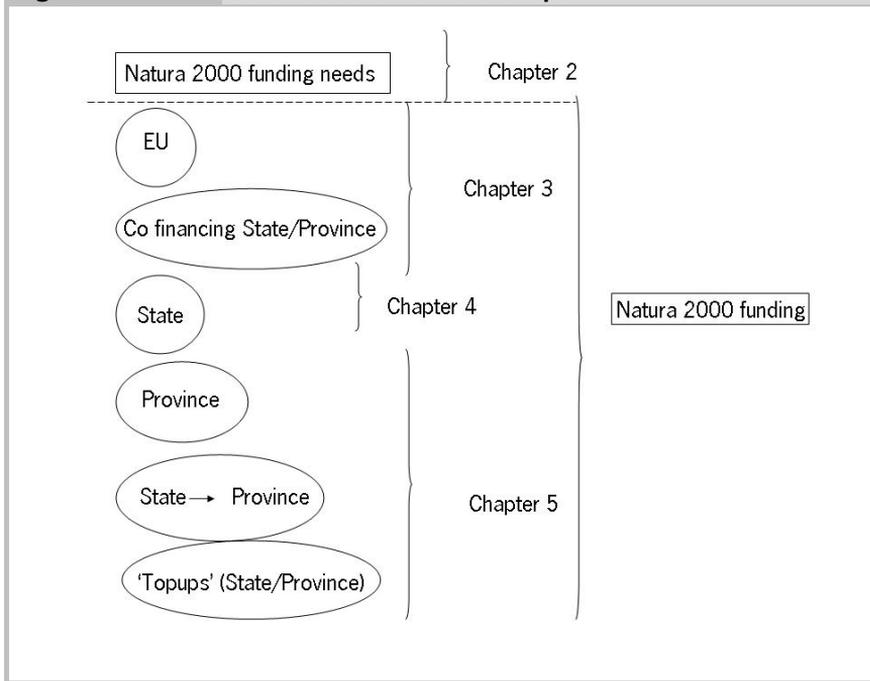
We cannot directly compare these benefits with the costs of measures to maintaining or restoring the Natura-2000 network to a favourable status. It was not studied whether the implementation of these measures will lead to increasing benefits.

This report has been prepared between September 2008 and February 2009. We answer the abovementioned questions mainly using desk research on public sources. One of the starting points for the analysis is the Handbook for Financing Natura 2000 (EU, 2007).

Figure 1.1 shows an outline of the report, which consists of six chapters. Chapter two elaborates an estimation of costs of maintaining or restoring Natura 2000 to a favourable status. The next chapter contains the assessment of the various European funds, in order to answer the second question above. State and Provincial funds are elaborated in chapter 4 and 5. We finish with some concluding remarks in chapter 6.

In analysing both European and Dutch funds, one should be aware of the connections between the funds. Provinces' activities can be financed by European, State and Provincial funds at the same time. We have relied on the budgets of European funds, State funds and Provincial funds. The abovementioned connections between these funds are not always transparent in the individual funds' budgets and this means a risk of overlap. We have avoided this risk using the method described in chapter 5.

Figure 1.1 Schematic overview of the report



European funding is in general complemented with additional national co-financing. Both are reported on in Chapter 3. The Netherlands have also added additional financial resources to the budget of the European Agricultural Fund for Rural Development ('top-ups'). As Provinces are mainly responsible for these funds, we report on them in chapter 5.

Important in this respect is also the following. Since 1 January 2007 there is one budget available for Provinces for maintaining the rural area vital in the Netherlands: the Investment budget Rural Areas (ILG). In principle, Provinces are made responsible for these funds and therefore we report on these ILG funds in chapter 5.

Finally, we use a number of periods, which vary between the different chapters. We distinguish two periods to allocate costs in chapter two: 2007-2015 and 2016-2020. The periods in the chapters on the European, National and Provincial funds are deducted from the EU budget period: 2007-2013. Table 1.1 gives a brief explanation.

Table 1.1		Some important years, mentioned in this report
Year	Description	
2007	Start of EU budget period	
2013	End of EU budget period	
2015	Desiccation problems in 30 'sense of urgency' areas solved	
2020	Favourable conditions in Dutch Natura-2000 sites achieved	

2 Costs of Natura 2000

2.1 Introduction and methodological remarks

This chapter elaborates on the estimates of the costs to maintain or to restore the favourable conservation status at the Natura-2000 sites in the Netherlands. The emphasis in this chapter is on the 162 Natura-2000 sites that are being designated. Five marine sites in the North Sea have not yet been designated.

The majority of the costs estimates stems from ex-ante policy studies. A basic assumption underlying our estimates is that we make an inventory of *all costs* associated with measures that contribute to the maintenance or restoration of the favourable status of the Natura-2000 sites. This implies that various policy themes can be involved:

- Natura 2000;
- Rural development;
- EU Water Framework Directive;
- Dutch manure policy;
- Dutch National policy to reduce ammonia emission;
- Regional policy to reduce ammonia emission;
- Anti-desiccation policy.

An inventory of all costs also implies that the results will include both existing policy measures (as laid down in projects or administrative agreements) and policy measures that can be qualified as additional (necessary in the opinion of experts, but not yet part of projects or administrative agreements). It is not always possible to make a clear distinction between these two categories (Reinhard et al., 2006).

Costs in our report are comprised of the investment costs of the measure, the maintenance and management costs of the measure and the costs and benefits¹ of the effect of the measure. They are presented as loss or loss of income and they do include effects on economical sectors (agriculture, recreation, drinking water sector). They do not include the indirect effects (for instance a reduction in income in the milk processing industry, caused by measures affecting dairy farmers). Also costs of measures in other countries, which can benefit Dutch Natura-

¹ Only those benefits that directly influence income of a sector (due to cost-savings).

2000 sites, are not taken into account. Also, we do not take inflation into consideration and therefore we did not discount costs to a base year.

It is not entirely clear when a favourable status has to be achieved. Related to desiccation in Natura-2000 sites 2015 and 2027 are mentioned (PBL, 2008). We assume that favourable conditions have to be achieved in 2020, based on the goals of the Dutch Nature Policy (LNV, 2000; LNV, 2004a; VROM et al., 2006; LNV, 2007b). In 2015, desiccation problems in 30 'sense of urgency' areas must be over (see also section 2.2). Therefore, we distinguish two periods to allocate costs: 2007-2015 and 2016-2020.

The Guidance Handbook of the EC mentions 25 different Natura 2000 management activities (EC, 2007). The available information on costs to maintain or to restore the favourable conservation status does not have the same detail in activities at all. Furthermore, we assume that activities 1-4 (category 'establishment of Natura-2000 sites') are almost completed in the Netherlands. We do find it important to separate costs for regular management and restoration management on the one hand, and costs aimed at improving water quality, reducing desiccation and ammonia emission on the other hand.

At the moment, it is still not clear what the effect of the designation of Natura-2000 sites on existing (economic) activities (e.g. recreation) will be, as plans to manage the Natura-2000 sites are still being developed at the moment. Some of these costs do occur in this report (related to agricultural activities). If existing economic activities would be restricted, this could lead to extra costs, not accounted for in this report.

2.2 Funding needs 2007-2020

This paragraph goes into more detail with respect to the different types of activities and associated costs, as mentioned in the Guidance Handbook of the EC.

Preparation of management plans; monitoring and surveying

In the Netherlands, management plans are being prepared at the moment. The Ministry of Agriculture, Nature and Food Quality has estimated the costs of this preparation (Ministerie van LNV, 2008a) The minister reported to parliament that the preparation of these plans (including the final phase in the designation) in total will cost €26.3m until 2010. Monitoring and surveying will cost an extra €10m in total from 2008 until 2012. Both estimates are based on calculations for 159 Natura-2000 sites (Ministerie van LNV, 2008a). No information on costs to occur after 2012 is available yet.

Ongoing habitat management

De Jong et al. (2007) estimate the costs for regular conservation management for all habitat types. They made an inventory on regular management measures and restoration management measures, for each subhabitat type, using descriptions of all habitat types (including their management) (Janssen et al. (2005)) and Conservation Objectives Classification ('Natuurdoeltypen', Bal et al., 2001), supplemented with information from managers. In their study the total area of Natura 2000 habitats that has been considered is approximately 515,000ha. The area is based on the information contained in the Dutch national database at the end of 2006. Approximately 77,500ha require regular management - the remaining area is not subject to regular nature management and consist mostly of coastal estuaries. On a yearly basis, €13-14m is necessary for this regular management. Over the period 2007-2015 this means costs of €117-126m, while during 2016-2020 costs are assumed to be €65-70m.

Restoration management

De Jong et al. (2007) also estimated that for a total of some 20,000 to 32,000ha restoration measures are needed. These are once-only measures, to restore habitats that are in a not favourable status at the moment. For this area the costs for restoration management are in between €16 to 27m a year for the coming 10 years. In this study it is assumed that restoration measures are executed in the coming 10 years (2007-2016). Costs are evenly distributed over the years. This results in costs in the period 2007-2015 of €144-243m. During 2016-2020, costs are assumed to be €16-27m. IPO (2007) estimated the costs of restoration management to be €208m to reach a favourable conservation status and this corresponds well with De Jong et al. (2007).

Reducing ammonia emission

Restoration management is one of the measures to reduce ammonia emission, to neutralise the effect of acidification of Natura-2000 sites (Van Bommel et al., 2007). As restoration management alone is not sufficient other measures have to be taken. Relocation of livestock farms and use of air filters are other measures mentioned by IPO (2007) and Van Bommel et al., 2007. Relocating livestock farms (dairy) will cost €177m from 2005-2027 (IPO, 2007). This measure is categorised under investment costs (land purchase etc.). We distribute these costs evenly over the two periods (€8m yearly).

Using air filters on all poultry and pig farms in a zone of 1,000m around all Natura-2000 sites will cost approximately €15.8m yearly (Van Bommel et al.,

2007), which amounts to €142m from 2007-2015 and an additional €79m during the remaining period.

Improving water quality

Improving surface water quality is a goal of both the Dutch manure policy and the EU Water Framework Directive. Therefore certain measures are related to both policies. Reinhard et al. (2006) estimate that the costs for measures related to both policies will be in between €21m and €33m yearly. Reduction or even stopping the use of manure and fertilisation is one of the main measures to improve water quality.

Moreover, extra investments of €50-200m are necessary to solve sediment problems in the Markermeer. These investments should be attributed to Natura 2000, the EU Water Framework Directive or both (Reinhard et al., 2006). Costs of these investments were not available from Reinhard et al. (2006). Recent information (Rijkswaterstaat, 2008) learns that solutions for sediment problems are still under consideration. Therefore, these figures are not included in the total costs.

Recent information (PBL, 2008) indicates that Natura-2000 sites will need additional measures, to reach a favourable conservation status. Therefore, the presented costs for improving water quality in table 2.2 can be regarded as an underestimate. Additional costs for 16 areas (North Sea coastal zone, Wadden Sea and Delta areas) amount to €8-15m per year. In the same area €2-3m have to be invested in the Wadden Sea. Costs of these investments were not calculated by Reinhard et al. (2006). Measures to be taken are still under consideration (Rijkswaterstaat, 2008) and therefore costs of these measures are not included in the total.

Desiccation

Ever since the 1980s it is politically accepted that nature areas in the Netherlands have been suffering from lowered groundwater tables due to intensified drainage of agricultural areas (Beugelink et al., 2006). In the Netherlands, this is called desiccation. About 222,000ha of nature area (both inside and outside Natura-2000 areas) in the Netherlands is desiccated. Provinces have selected priority areas to solve desiccation problem and these areas are mainly Natura-2000 areas. The Minister of Agriculture, Nature and Food Quality has informed the Dutch parliament that the desiccation problems in 30 'sense of urgency' areas must be over by 2015 (Ministerie van LNV, 2007b). IPO (2007) has elaborated the costs of a number of measures to reduce desiccation. Table 2.1 gives a summary.

Measure	Number of Natura-2000 sites	Costs (€m)
Increase water levels in		
- agricultural areas	44	3
- built on areas	3	14
Purchase of agricultural enclaves	4	29
Purchase of agricultural land to prevent nutrient pollution through groundwater	15	2
Reduction of drinking water sources	11	380
Restoration of local water systems	27	226
Other measures (estimate)		135
<i>Total</i>		<i>789</i>

IPO (2007) calculated these costs under the assumption that these are urgent measures. Therefore, we allocate them to the period 2007-2015. The major part of these costs can be regarded as non recurrent.

Enforcement of Natura 2000

There is little or no information on the future costs of enforcement for Natura 2000. To give an impression on the possible magnitude of these costs: it is estimated that the enforcement of the 'Natuurbeschermingswet' and 'Flora- and Faunawet' together will cost €4m annually (LNV, 2007a.). We assume that 50% of these costs (€2m) can be allocated to the enforcement of Natura 2000.

Wadden Sea

Reinhard et al. (2006) refer to extra investments in the Wadden Sea as a result of the 'PKB Waddensee' of at least €100m. Costs of these measures are not available from Reinhard et al. (2006), and they are not included in the total costs, as it is not clear how costs of these measures could be allocated to the distinguished period.

2.3 Summary

Table 2.2 summarises the funding needs in the two periods. The total funding need from 2007-2020 amounts to €1.9-2.3bn. Roughly 20% of these costs are aimed at management of Nature 2000 areas (partly ongoing, partly restoration management), whereas the other costs mainly focus on the improvement of the

environmental quality as a condition to a favourable status of the Natura-2000 sites.

The presented funding needs have to be regarded an underestimate. Recent information (PBL, 2008) indicates that Natura-2000 sites will need additional measures to improve water quality. Moreover, information on costs of marine sites is not yet available and costs of some investments have not been taken into account, as their volume is not clear at this moment.

Activity	Funding need 2007-2015 (€m)	Funding need 2016-2020 (€m)
Preparation of management plans	26	pro memoria
Monitoring and surveying	10	pro memoria
Ongoing habitat management	117-126	65-70
Restoration management	144-243	16-27
Reducing ammonia emission	214	119
Improving water quality	189-297	105-165
Improving water quality North Sea coastal zone, Wadden Sea and Delta areas	72-135	40-75
Reducing desiccation	789	pro memoria
Natura 2000 enforcement	18	10
Wadden Sea	pro memoria	pro memoria
<i>Total</i>	<i>1,579-1,858</i>	<i>356-467</i>

3 European Funds for Natura 2000

3.1 Introduction and general methodology

This chapter discusses potentially available funds for Natura 2000. It provides more insight into how many financial resources are potentially available for the Netherlands from the various EU funds. The funds to be studied are the European Agricultural Fund for Rural Development (EAFRD), the European Regional Development Fund (ERDF), the Cohesion Fund (CF), the European Social Fund (ESF) and LIFE+. We did not include the European Fisheries Fund (EFF) in this analysis. Also, this chapter gives a first assessment on how many financial resources are actually allocated to the Natura-2000 network in the Netherlands in 2007-2013.

In general, in analysing the EU funds we follow the methodology as stated in the Handbook (EU, 2007). Starting points are the operational programmes for these funds. As the new EU budget period has just started, information on the actual amount of financial resources spent in various funds is still scarce and the operational programmes are in fact the main information source in this respect. At the moment, only for the EAFRD and, to a lesser extent, LIFE+ an obvious connection between activities and funding is present.

The analysis of potentially available funding for Natura 2000 is different for each fund. The analysis has been set up from the assumption that the Dutch government can make other choices on funding the Natura-2000 network in the Netherlands. This assumption is further elaborated for each fund.

In general, EU regulations and the conditions formulated in the national strategies and operational programs are the starting point to determine whether a project can receive funds from the ERDF or the EAFRD. EAFRD projects will be small scaled, locally oriented and related to an agricultural environment. Projects funded by the ERDF will be more large-scale, multi-actor projects, aimed at Regional Competitiveness.

The LIFE+ regulation state, that measures or projects that are granted funds from another European fund, cannot apply for funding by LIFE+. Dutch co-financing of LIFE+ projects will be aimed at small-scale investments in Natura-2000 sites (e.g. restoration measures). Ongoing management by farmers and other landowners is meant to be financed from the EAFRD (POP2, 2008).

3.2 European Agricultural Fund for Rural Development

The objectives of the European Agricultural Fund for Rural Development (EAFRD) are threefold:

- improving the competitiveness of agriculture and forestry by supporting restructuring, development and innovation;
- improving the environment and the countryside by supporting land management;
- improving the quality of life in rural areas and encouraging diversification of economic activity.

One of the goals of the Dutch strategic plan is sustainable conservation of Natura-2000 sites and to strengthen biodiversity, especially by agriculture. The budget for the Netherlands is €967m (including 50% additional Dutch co-financing). The Netherlands also aims to add additional financial resources to this budget ('top-ups') and they also expect private sector funding (€614m).

Potentially available funds from the EAFRD

Total funding available in the EAFRD is some €967m in the period 2007-2013 (Dutch co-financing included, top ups and private sector contributions excluded). Member States have flexibility to split expenditure across four axes of the EAFRD. The Netherlands have chosen to allocate 30% of the EAFRD budget to axis 1, 2 and 3 each. Measures to maintain or restore the Natura-2000 network to a favourable status in the Netherlands are likely to be financed from axis 2. If the Netherlands had chosen for a maximum allocation of funds to axis two of the EAFRD (75%), the potentially available funding from axis two would be about €725m. Corrected for the compulsory measures (i.e. agri-environmental measures), the potential available funding for Natura 2000 from axis 2 would be €508m.

We can assume the contribution to Natura 2000 of the other three axes (as we assess them in this chapter) to be constant. Measures in these axes do benefit certain measures in Nature 2000 sites as well. That results in a potential funding of almost €540m from the EAFRD, excluding top-ups and private sector contributions.

Member States have flexibility to split expenditure across four axes as long as the minimum thresholds are respected (see also the Handbook). The second axis (Improving the environment and the countryside) will contain most Natura-2000 measures. The first axis also contains some funds, that have been allocated to Natura 2000 or the National Ecological Network (NEN), regarding relocation of dairy, poultry or pig farms. These farms are located in or close to Natura-2000 sites or the NEN. Relocating them helps solving ammonia emission (and deposition) problems.

Forty-five percent of the NEN on land, which comprises 728,000ha, is Natura-2000 area (see Broekmeyer et al., 2007). The Natura-2000 areas are a part of the NEN for nearly 100% (Lammers et al., 2005). Therefore, we will have to adjust some of the available budgets, as it is not likely that these budgets are allocated to Natura-2000 sites alone.

Table 3.1 summarises the assumed financial contribution of the EAFRD to maintain or restore the Natura-2000 network to a favourable status. In table 3.1, we break these results up into funds from the European Union, from Dutch co-financing, from top-ups and from private sector contributions. This break up is in fact the connection of the present chapter with the next chapters on State and Provincial funds.

For each relevant measure in the Dutch Rural Development Programme (RDP), we provide an estimate of the amount of funding allocated to Natura 2000. Additionally, we assume these funds to be allocated to funds from the European Union, Dutch co-financing, top-ups and private sector contributions in the same way the Natura 2000 funding is allocated within the total measure.

'EU Funding' and 'Dutch Co financing' are a logical item in this chapter on European Funds. We consider top-ups as being additional to measures from RDP. As they are mainly programmed by the Dutch Provinces (Website Regiebureau POP, 2008), we will elaborate on them in chapter 5. They will not be regarded as 'European funds' or State funds, but as 'Provincial funds'. Therefore, European funds for Natura 2000 from the EAFRD add up to some €36m from 2007-2013.

Table 3.1		Available funding and funding allocated to Natura 2000 of four measures of the EAFRD, assumed to contribute to Natura 2000			
Measure	Total EAFRD	EU Funding	Co-funding Netherlands	Top up	Private sector contribution
	€m	€m	€m	€m	€m
Measure 125	255	80	80	55	40
Natura 2000	23.0	7.2	7.2	5.0	3.6
Measure 214	412	108,6	108,6	195	Not applicable
Natura 2000	3.7	1.0	1.0	1.7	
Measure 216	199	9	9	181	0
Natura 2000	129.4	5.9	5.9	117.6	
Measure 323	116	28	28	2	58
Natura 2000	16.6	4.0	4.0	0.3	8.3
<i>Total Natura 2000</i>	<i>172.7</i>	<i>18.1</i>	<i>18.1</i>	<i>124.6</i>	<i>11.9</i>

Source: Dutch Rural Development Programme, October 2008; for Natura 2000 own calculations (see text)

Hereafter we discuss some of the measures from the Dutch Rural Development Programme more in detail.

Measure 125 - Infrastructure to develop/adapt agriculture and forestry

Relocating animal farms in or close to Natura-2000 sites or the NEN. The total budget is €51m in total (including top-ups and private sector contributions), for Natura 2000 this is assumed to be €23.0m from 2007-2013. Corrected for private sector contributions and top-ups, we assumed the funding to be €14.4m.

Measure 212 - Less-Favoured Areas (LFA)

The EU's policy with respect to less-favoured areas (LFA) aims to safe guard the use of agricultural land in less-favoured areas, by granting direct income support to farmers in four different types of LFA: 1) mountain areas; 2) other less-favoured areas; 3) areas with specific handicaps; and 4) areas with environmental restrictions related to the Bird and Habitat Directive and the Water Framework Directive. The European Commission wishes to review the criteria for designating the category 'other less-favoured areas'. The Commission is expected to propose new criteria for the category 'other less-favoured areas' in 2008/2009 (Terluin et al., 2008). The Netherlands has only designated LFA with specific handicaps: deep peat meadows, small-scale sandy landscapes,

brook valleys and inundation areas, river forelands and slopes. The area of LFA in the Netherlands covered some 233,000ha in 2007.

Agriculture is still present in Natura-2000 sites; some 90,000ha is in use by agriculture (Van Veen and Bouwma, 2007), mainly in Birds Directives' areas. We assume that for the moment Measure 212 hardly benefits Natura-2000 sites, as they are mainly taken on agricultural lands outside Natura 2000.

Measure 213 - Improvement of environmental and water conditions

This measure is aimed at improving environmental and water conditions and is related to Natura 2000 and to the EU Water Framework Directive. This measure has not been further elaborated in the Dutch Rural Development Programme, as it is not clear at the moment which measures will be necessary. No funds have been allocated so far to Measure 213.

Measure 214 - Agri-environmental measures

Nature conservation measures on agricultural land by farmers have a budget of €412m. These subsidies are allocated within the NEN for about 66% (Ministerie van LNV, 2008c). On about 3% of Natura-2000 land, nature conservation measures (under the Dutch agri-environmental measures scheme 'SAN') are taken (Van Veen and Bouwma, 2007). This implies that some €3.7m benefits Natura-2000 sites, including €2.0m from the European Union and Dutch co-financing.

Measure 216 - Non-productive investments

This includes a subsidy on investments, aimed at reducing the desiccation problem and at improving water quality in Natura-2000 sites and the NEN ('TOP-lijst'). The share of Natura-2000 areas in the tackling of the desiccation problem is about 65% (Ministerie van LNV, 2007b). The budget is €199m, for Natura 2000 it is assumed to be €129.4m. The major part of this budget consists of top-ups and we assume the funding from the EU and Dutch co-financing to be €11.8m in total.

Measure 323 - Protection and development of natural heritage

Preparation of management plans, strategies and schemes for Natura-2000 sites is one of the seven actions within this measure of the EAFRD. Therefore we assume that one-seventh part of the budget will be allocated to Natura 2000. (i.e. €16.6m). Corrected for expected private sector contributions and top-ups, we assume the funding to be €8.0m.

Axis 4: LEADER

The Dutch RDP states that the Leader approach is not so appropriate to attain goals like realisation of the NEN. Therefore, we assume that no funding from this forth axis will be allocated to Natura 2000.

Mid-term evaluation; 'Health Check'

In 2010 the RDP will be reviewed. In combination with other relevant developments, such as the implementation of the European Water Framework, this could be a reason to consider the allocation of Dutch and European Financial means. In addition, within the 'Health Check' of the Common Agricultural Policy, a further budget shift from direct income support (pillar 1) to rural development (pillar 2) is discussed. The effect of both the evaluation and of the Health Check on the EAFRD budget and the Dutch co-financing budget is uncertain at the moment.

3.3 LIFE+

In the European Union as a whole, LIFE+ has a budget of €2,1bn for the period of 2007-2013. LIFE+ consists of three pillars, one of which is 'Nature and Biodiversity'. At least 50% of the budget has to be spent on this pillar, which itself consists of two parts: LIFE+ Nature and LIFE+ biodiversity. The first part is only to support Natura-2000 projects, the latter one also supports other projects on biodiversity.

September 2007 was the first call for LIFE+ project and during the fall of 2008, the second call was open. Projects in the Netherlands were granted some €6m as a result of the first call (in the EU in total €187m); the second call has a budget of about €6.6m for the Netherlands; in the EU as a whole the budget for this call is €207m (www.senternovem.nl/life/).

The EU budget is split using criteria on population and nature and biodiversity (see box below).

Criteria for the distribution of LIFE+ budgets (REGULATION (EC) No 614/2007)

- (a) population (55%):
 - (i) the total population of each Member State (50 %)
 - (ii) the population density of each Member State (5 %)
- (b) nature and biodiversity (45%):
 - (i) the total area of sites of Community importance for each Member State, expressed as a proportion of the total area of sites of Community importance. A weighting of 25% shall be applied to this criterion;
 - (ii) the proportion of a Member State's territory covered by sites of Community importance in relation to the proportion of Community territory covered by sites of Community importance. A weighting of 20% shall be applied to this criterion.

These criteria lead to a Dutch share of 3.1% of the total budget. We therefore assume that 3.1% of the LIFE+ budgets will be spent in the Netherlands during 2007-2013. We also take into account the maximum of programme costs (22%, see REGULATION (EC) No 614/2007), and we deduct these costs from the total available LIFE+ budget.

Combining this with the minimum of 50% to be spent in the 'Nature and Biodiversity' pillar, we estimate a total of €25.4m to be potentially available from European sources. If these funds are entirely spent on Natura 2000, the Netherlands only has to add an extra 25%, as co-financing of 25% is mandatory regarding projects in LIFE+ Nature. This leads to available funds of about €34m for 2007-2013, co-financing included.

3.4 European Regional Development Fund

3.4.1 Introduction

For the programming period 2007-13 the Cohesion Policy of the EU includes three funds: the European Regional Development Fund (ERDF), the Cohesion Fund (CF) and the European Social Fund (ESF). These funds finance three objectives:

1. 'Convergence' financed by ERDF, ESF and CF;

2. 'Regional Competitiveness and Employment' financed by ERDF and ESF;
and
3. 'Territorial Co-operation' financed by ERDF.

Convergence regions are those where the Gross Domestic Product (GDP) per capita is less than 75% of the EU average. The Dutch GDP is above this limit and therefore the Netherlands are not eligible for funding by the Cohesion fund. All other regions are potential candidates to the 2nd Objective. All 27 EU member states are qualified for funding under the 3rd Objective 'Territorial Co-operation'.

To estimate the potentially available funding from the ERDF for Natura 2000 we used the same method for both objective two and three. First, we started with the information from the Dutch National Strategy (Nationaal Strategisch Referentiekader, EZ, 2006) to assess the budget for the Netherlands. Second, we looked at the operational programmes, which give information on the percentage of the budget to be spent on Lisbon Goals ('indicative breakdown'); one of these goals is 'promotion of biodiversity and nature protection (goal no 51). This is regarded as potential funding for Natura 2000 in the Netherlands. We do not regard the other 'Lisbon goals', 'promotion of natural assets' (goal no. 55) and 'the protection and development of natural heritage' (goal no. 56), as relevant; they seem more related to tourism.

3.4.2 Regional Competitiveness and Employment

3.4.2.1 Regional Competitiveness

The European funds for Regional Competitiveness are allocated to four regions of the Netherlands: West, North, East and South. These regions have all established their own priorities, within the framework of the National Government. They also formulated their own operational programme.

These operational programmes have the obligation to at least allocate 60% of their budget to Lisbon goals (indicative allocation). We assumed that funds that have not been allocated to Lisbon goals will be distributed in the same way (proportionate) as the funds that are allocated to Lisbon goals.

Table 3.2 gives an overview of the ERDF funding in the four Dutch regions to stimulate Regional Competitiveness, as well as the funds potentially available for Natura 2000.

Table 3.2 Overview of ERDF funding (regional competitiveness) and additional Dutch funds, potentially available for Natura 2000 (€m)

Dutch region	Budget for Regional Competitiveness	Budget not allocated to Lisbon goals	Budget allocated to 'promotion of biodiversity and nature protection'	Budget potentially available for Natura 2000 (ERDF part)	Additional funding by Dutch government (%)	Budget potentially available for Natura 2000 in the Netherlands
West	310.6	115	2.0	3.2	60	8.0
North	169.4	64	1.7	2.7	60	6.8
East	164	63	2.0	3.3	55	7.3
South	186	63	0.0	0.0	61	0.0
<i>Total</i>	<i>830</i>	<i>305</i>	<i>5.7</i>	<i>9.2</i>		<i>22.1</i>

To clarify the procedure to estimate the budget potentially available for Natura 2000, we give the example of Region West. First, the budget potentially available for Natura 2000 (ERDF part) is estimated, using the budget allocated to 'promotion of biodiversity and nature protection' (€2.0m), the total budget for regional competitiveness (€310.6m) and the 'not allocated' budget (€115m): $(2.0/(310.6-115)) * 310.6 = €3.2m$. Then we combine this with the percentage of additional Dutch funding (60%) and estimate a budget of $(3.2/(1-0.6))$ equals €8.0m.

3.4.2.2 Employment

The Netherlands has one Objective-2 programme related to Employment. As the Dutch National Strategy (Nationaal Strategisch Referentiekader, EZ, 2006) shows, no funds from the ESF are allocated to 'promotion of biodiversity and nature protection', the 'promotion of natural assets' or 'the protection and development of natural heritage'. Therefore we assume that no funding from the ESF will contribute to Natura 2000 in the Netherlands.

3.4.3 European Territorial Cooperation

The Netherlands participate in seven programmes under the third Objective, 'Territorial Co-operation' (former 'INTERREG'). Four of them are cross-border

cooperation programmes (Nederland-Duitsland, Maas-Rijn, Nederland-Vlaanderen, Maritime programme), three are transnational cooperation programmes (North Sea, Northwest-Europe, Interregional Cooperation Programme). The total budget for the Netherlands amounts to about €247m (2007-2013).¹

Table 3.3 gives an overview of the ERDF funding to stimulate territorial cooperation, as well as the funds potentially available for Natura 2000. The Interregional Cooperation² and the North Sea programme³ have been left out of the table; their operational programmes do not give enough information to assess whether funding for Natura 2000 in the Netherlands is possible. In Table 3.3, it is assumed that the budget potentially available for Natura 2000 in the Netherlands (ETC-part) can be deduced from the share of the budget allocated to 'Promotion of biodiversity and nature protection' in the overall budget of the programmes, and the total ERDF budget for the Netherlands.

¹ Interregional Cooperation programme not included.

² The Interregional Cooperation programme has a budget of €321m, to be spent in all member states. Priority no. 2, Environment and risk prevention, will receive €125.3m with 25% additional national funding.

³ The North Sea Region Programme (Sweden, Ireland, UK, Belgium, Netherlands, Germany, Denmark) has a budget of €138.5m; €39m is labelled to Priority no. 2, 'promoting the sustainable management of our environment' (50% additional funding mandatory). The Netherlands has a budget of €31.1m (excluding national funds) allocated to this programme (EZ, 2006).

Table 3.3		Overview of ERDF funding for European Territorial Cooperation (ETC), and additional Dutch funds, potentially available for Natura 2000 (€m).				
Pro-gramme	Budget for Euro-pean Ter-ritorial Coopera-tion	Budget al-located to 'Promo-tion of biodiver-sity and nature protec-tion'	ERDF budget for the Nether-lands	Budget po-tentially available for Natura 2000 in the Neth-erlands (only ETC)	Addi-tional funding by Dutch govern-ment (%)	Poten-tially available for Natura 2000 in the Neth-erlands
Nederland-Duitsland	138.6	0.9	86.0	0.6	50	1.1
Maas-Rijn	72.0	0.7	22.6	0.2	50	0.4
Nederland-Vlaanderen	94	1.9	49.3	1.0	50	2.0
Maritime	167	1.7	11.3	0.1	45	0.2
Northwest-Europe	173	10.9	46.7	2.9	50	5.9
<i>Total</i>	<i>644.6</i>	<i>16.1</i>	<i>215.9</i>	<i>4.8</i>		<i>9.6</i>

3.5 Summary

Table 3.4 summarises the results of chapter 3. Some €100m is estimated to be available from European funds and Dutch co-financing from 2007-2013.

Table 3.4		European Funds (including Co-financing by the Netherlands) allocated to Natura 2000 (2007-2013)
Fund	Budget (€m)	
EAFRD	36	
LIFE+	34	
ERDF Regional Competitiveness and Employment	22	
ERDF funding for European Territorial Cooperation (ETC)	10	
ESF	0	
<i>Total</i>	<i>102</i>	

4 State funds for Natura 2000

4.1 Introduction and methodology

This chapter elaborates Dutch State funds to maintain or restore the Natura-2000 network to a favourable status. We concentrate on three departments, as we assess them to be the most important for Natura 2000:

1. Ministry of Agriculture, Nature and Food Quality (ANF), responsible for management plans of 41 of the 162 Natura 200 sites;
2. Ministry of Housing, Spatial planning and the Environment (HSE), which is responsible for the environmental quality of Natura 2000;
3. Ministry of Transport, Public Works and Water Management (TPW); 19 of the 162 sites and their management is under the responsibility of this ministry.

One other State department is directly involved in realising Natura 2000: the Ministry of Defence is responsible for one management plan. We do not include the funding by this department in this chapter for pragmatic reasons. The Dutch Provinces are currently developing management plans for 101 Natura-2000 sites. We elaborate their contribution in chapter 5.

In the Netherlands, managers of nature areas (private landowners) can apply for tax benefits. We do not take into account these benefits, which are part of the responsibility of the Ministry of Finance.

In this chapter we omit those State funds, which serve to co-finance European funds. We have already reported on these funds in chapter three. Since January 1st 2007 there is one budget available for Provinces for maintaining the rural area vital in the Netherlands: the Investment budget Rural Areas (ILG). The ILG does appear on the budget of the State. As, in principle, Provinces are made responsible for these budgets funds, we allocate 'ILG funds' to Provinces (see Chapter 5). We only report on those State funds 'outside of the ILG' in the current chapter.

Our main source of information are the budgets of the ministries mentioned above, occasionally we have used additional information. This mainly concerns correspondence with the Dutch Parliament.

4.2 Ministry of Agriculture, Nature and Food Quality (ANF)

We will now elaborate on the Ministry of Agriculture, Nature and Food Quality. The national Budget of 2008 of LNV includes three articles that could stimulate maintenance or restoration of the Natura-2000 network to a favourable status:

- Nature Development in the National Ecological Network (NEN) (23.12);
- Management of the NEN (23.13);
- Management outside the NEN; protection of international biodiversity (23.14).

About 30% of the Nature-2000 areas (on land) are private property (Van Veen en Bouma, 2007). Purchase of land by the government (State or Province) is another measure, as mentioned in chapter 2. We assume that this measure is part of another article in the Dutch Nature Budget, 27.11 'Reconstructie zandgebieden'. This article is part of the ILG; therefore, we refer to chapter 5.

We do not consider research budgets (mainly of Wageningen UR), nor those budgets related to the organisation of the implementation at the Ministry of Agriculture, Nature and Food Quality itself.

4.2.1 Nature development in the National Ecological Network

This article of the Dutch Nature Budget provides (amongst other parts) funding for measures in the 'new nature areas' (mainly formerly in use by agriculture) of the NEN. These measures are directed at providing the necessary conditions for nature in these areas. If these conditions are realised, management of the areas will be effective. For the main part of this measure, we refer to chapter 5, as funding these measures is part of the ILG.

State funds for these measures from 2007-2013 comprise €36.9m (Begroting LNV 2007, 2008). According to Van Veen en Bouma (2007), development of new nature areas in the NEN does contribute to the realisation of necessary environmental conditions for Natura 2000 in the future. Forty-five percent of the NEN on land, which comprises 728,000 ha, is Natura-2000 area (see Broekmeyer et al., 2007). Therefore we assume that 45% of the funding for Nature development in the National Ecological Network does benefit Natura 2000, which equals €16.6m.

Another part of this article refers to aquatic nature restoration in combination with measures to prevent flooding (€18.5m available until 2013), to be taken in the river foreland of IJssel, Meuse and Rhine. As these measures are primarily taken to prevent flooding and are planned outside Natura-2000 areas,

we assume no contribution to the maintenance or restoration of the Natura-2000 network to a favourable status.

4.2.2 Management of the National Ecological Network

In this article, in general aimed at conservation management measures, funding of activities of Staatsbosbeheer (SBB, an independent administrative body whose principal is the ministry of Agriculture, Nature and Food Quality) attracts attention. Staatsbosbeheer manages 210,000ha in total, of which 108,000ha is Natura-2000 area (51%, Broekmeyer et al., 2007). Staatsbosbeheer receives €348.8m to manage their areas in the period 2007-2013. We assume that 51% of these receipts benefit Natura 2000 (€177.8m).

4.2.3 Management outside the National Ecological Network; protection of international biodiversity

Although this article of the Dutch Nature Budget is mainly aimed to finance measures in areas outside the NEN, some parts could benefit Natura 2000. Certainly relevant is the compensation for the preparation of management plans, managers of Natura-2000 sites can qualify for. This amounts to €52.5m (LNV, 2008).

The budget 2008 of the Ministry of ANF also contains budget for improving the quality of the National Parks by means of extension and promoting of (also international) cooperation between parks, and execution of an investment program. This budget amounts to €12.0m in the period 2007-2013. We assume these funds are used to implement annual plans of national parks and that those plans mainly consist of measures dealing with recreation and promotion and research of the national park. The actual management is financed by other sources (for instance SN, see chapter 5). Therefore, we allocate no funds to the maintenance and restoration of the Natura-2000 sites to a favorable status.

Budget item number 23.14 (Conservation of species) concerns the conservation and sustainable usage of ecological networks, such as Natura 2000 and PAN European Ecological Network sustainable usage and management of marine biodiversity and the development of new financial instruments concerning biodiversity. Related to that the Ministry of ANF strives to realise a favorable status for all species. The total budget for seven years (2007-2013) amounts to €26.4m.

This budget does not only concern Natura-2000 sites, but a main part of this budget does benefit Natura-2000 landscapes in the Netherlands. Therefore, we

assume that 70% of the budget can be assigned to Natura-2000 sites. We estimate, that a total of €18,5m is concerned with conservation of species in Natura-2000 sites.

4.3 Ministry of Housing, Spatial Planning and the Environment (HSE)

The Ministry of Housing, Spatial planning and the Environment (HSE) is responsible for the environmental quality of Natura 2000. These funds are allocated through the ILG and therefore they will appear in chapter 5.

Another part of the budget of this Ministry is reserved for the 'Waddenfonds'. This is a fund aimed at additional investments in the Wadden Sea area. Until 2013, €237m is available. About €104m is earmarked under 'Increasing and strengthening nature- en landscape in the Wadden Sea area' (Ministerie van VROM, 2007). The 'Waddenfonds' uses a tender system. So far, half of the granted budget is allocated to 'nature and landscape' (VROM, 2008). We assume that the earmarked budget of €104m will entirely benefit Natura 2000 in the Wadden Sea area.

4.4 Ministry of Transport, Public Works and Water Management (TPW)

State Waters and Waterways (Rijkswateren)

The introduction already refers to the responsibility of the Ministry of Transport, Public Works and Water Management (TPW) for 19 of the 162 Natura-2000 sites in the Netherlands.

In December 2008, the Ministry presented their initial draft plans for the management and development of the waters and waterways from 2010-2015 (Beheer- en Ontwikkelplan voor de Rijkswateren, December 2008). These plans include measures related to Natura 2000, as well as measures related to the European Water Frame Work Directive and 'Waterbeheer 21e eeuw (WB21)'. Four separate plans have been developed (1) the IJsselmeer, de Rivers and (2) large canals, (3) North Sea Coastal Zone, Wadden Sea including Eems-Dollard and (4) Southwestern Delta area.

The plans specify costs for Natura-2000 measures in the range €18.5-22.5m from 2010-2015. They also indicate that more information is needed to assess what is needed to comply to the Natura-2000 goals. The plans do not

give information on specific measures related to the European Water Frame Work Directive, which will benefit Natura 2000 as well.

Dutch Long-term Defragmentation Programme (MJPO)

Together with the Ministry of ANF, the Ministry of TPW executes a long term program (2005-2018) to 'defragment' Dutch nature. This means that measures are planned to adapt infrastructure (State roads, State railroads and State waterways); wildlife passages are an example of a measure. In total 208 locations are part of the MJPO, which has a total budget of €410m. We assume that the MJPO has only a very limited contribution to Natura 2000 and therefore we do not take this part of the budget of the Ministry of TPW into account.

4.5 Summary

Table 4.1 summarises the results of this chapter. The main contribution of State funds to maintaining or restoring the Natura-2000 network to a favourable status is the management of the NEN by Staatsbosbeheer. State funds for Natura 2000 are estimated to amount to almost €400m from 2007-2013.

Table 4.1 State budgets for measures concerning the maintenance or restoration of the Natura-2000 sites to a favorable status (2007-2013)	
Budget item	Budget (€m)
Nature development in the NEN	17
Management of NEN	178
Species conservation	18
Wadden Sea Fund	104
Preparation of management plans	53
Management and development of the State Waters and Waterways	20
<i>Total</i>	<i>390</i>

5 Provincial funds for Natura 2000

5.1 Introduction and methodology

Since 1 January 2007 there is one budget available for Provinces for maintaining the rural area vital in the Netherlands: the Investment budget Rural Area (in Dutch: ILG, Investeringsbudget Landelijk Gebied). This total budget amounts to €3.2bn for a seven year period (2007-2013). The national government entered into management agreements with each of the twelve Provinces separately, for a seven year period (2007-2013). Each management agreement contains a fixed budget that the Province will receive for the performances the Province has agreed on to deliver.

Apart from the 'ILG' (paragraph 5.2), Provinces do receive additional State funding (paragraph 5.3). They have the possibility to financially contribute themselves to Natura 2000 as well, but within the timeframe of this project we were not able to identify those funds.

5.2 Provincial funding through ILG

In the National Budget 2008 of the Ministry of ANF (LNV, 2008) we have identified a number of items that may concern the maintenance or restoration of the Natura-2000 sites to a favourable status and is part of the ILG. These items (between brackets the number of the budget item in the Budget 2008 of ANF) are:

- Nature development in the National Ecological Network (23.12);
- Improving the environmental quality of nature (23.12);
- Management of the National Ecological Network (23.13);
- Conservation of species (23.14);
- Improving the quality of national parks (23.14);
- Reconstruction of sandy areas (27.11).

5.2.1 Nature development in the National Ecological Network

This article aims to funding measures in the 'new nature areas' (mainly formerly in use by agriculture) of the NEN. These measures are directed at providing the necessary conditions for nature in these areas. If these conditions are realised, management of the areas will be effective. Provincial funds for these measures

from 2007-2013 comprise €445.9m (Begroting LNV 2007, 2008 and 2009). As we already mentioned in chapter 4, development of new nature areas in the NEN does contribute to the realisation of necessary environmental conditions for Natura 2000 in the future. Therefore we assume that 45% of the funding for Nature development in the National Ecological Network does benefit Natura 2000, which is €200.6m.

5.2.2 Improving environmental quality of nature

This concerns the financing of measures aimed at improving the environmental quality of nature in the National Ecological Network (NEN). For example reducing desiccation in areas mentioned at the TOP-lists and taking cause-oriented and effect-oriented measures against acidification and overfertilisation. The total budget for seven years (2007-2013) amounts to €229.5m. The Ministry of ANF and the Ministry of Housing, Spatial Planning and the Environment finance that budget. However, we allocate this budget to the Provinces, as they are 'in charge' of this budget.

We have to assume that the ILG budget has a relation with the Dutch Rural Development plan, i.e. measure 216 (table 3.1). By assuming this, we prevent calculation errors. We allocate the total budget of measure 216 to this part of the ILG.

As part of measure 216 of the Dutch Rural Development Programme (POP), the Netherlands receive €9m of the EAFRD. Together with additional Dutch co-financing of €9m (see table 3.1), €18m of the €229m is already mentioned in the chapter on European funds. Top up's of measure 216 amount to €181m (table 3.1). We assume that this budget is completely Provincial (Website Regie-bureau POP, 2008). The remaining funds, €30m (229-18-181), are also allocated to the Provinces.

This means that the Dutch Provinces have €211m available for taking measures aimed at improving the environmental quality of nature in the National Ecological Network (NEN) and Natura-2000 sites.

Measure 216 is mainly aimed at reducing the desiccation problem and at improving water quality in Natura-2000 sites and the National Ecological Network (NEN, see chapter 3 on the 'TOP- Lijst'). The share of Natura-2000 areas in tackling these problems is about 65% (Ministerie van LNV, 2007b). This implies Provincial funds for 'Natura 2000' of €137m from 2007-2013.

5.2.3 Management of the National Ecological Network

According to the National Budget of 2008, the Ministry of ANF has allocated for a period of seven year (2007-2013) €666.5m for the management of the NEN. The major part (98.4%) of that budget is earmarked for 'Programma Beheer', the remainder for 'Natuur overig'. Activities include the management of nature areas, of the designated sites according to the Nature Protection Law (Natuurbeschermingswet), Natura-2000 sites and the twenty National Parks in the Netherlands.

'Programma Beheer' includes two subsidy schemes: the Subsidy scheme Nature management (SN) and the Subsidy scheme Agricultural Nature management (SAN). SAN is an agri-environmental scheme, co-funded by the EC by means of the Dutch Rural Development Program (Measure 214). The total budget for SAN amounts to €412m (see table 3.1). €108.5m is financed by the EC, €108.5m is co-financed by the Dutch government, the remainder (€195m) is 'top up' funding by the Netherlands.

Similar to the measures to improve environmental quality of nature, we allocate the total budget of measure 214 to this part of the ILG. This implies that for SN a budget of (€666m minus €412) €254m is available. This budget is available for both Natura-2000 sites and other (non-Natura) 2000 sites.

The total area subsidised by SN (December 21st 2005) in the Netherlands was 273,920 ha (MNP, 2007). According to Broekmeyer et al. (2007) 147,000 ha in Natura-2000 sites was subsidised by SN in 2005. So we estimate a budget of 54% of €254m (€136.5m) available for nature management of Natura-2000 sites in the Netherlands.

As already mentioned in chapter 3, nature conservation measures on agricultural land ('SAN') benefit the NEN. Some €1.7m (top-ups) are allocated to Natura 2000, on top of the contributions from the European Union and Dutch co-financing. So, in total €138m is available from management of the NEN to benefit Natura 2000.

5.2.4 Conservation of species

Budget item number 23.14 concerns the conservation and sustainable usage of ecological networks, such as Natura 2000 and PAN European Ecological Network, sustainable usage and management of marine biodiversity and the development of new financial instruments concerning biodiversity. Related to that the Ministry of ANF strives to realise a favourable status for all species. Therefore

the ILG contains a budget for Provinces for the conservation of species. The total budget for seven years (2007-2013) amounts to €8.1m.

This budget does not only concern Natura-2000 sites. We assume that 70% of the budget can be assigned to Natura-2000 sites (see chapter 4). Therefore, we estimate, that a total of €5.6m is concerned with conservation of species in Natura-2000 sites.

5.2.5 Improving quality of national parks

The national Budget of 2008 of LNV also contains an ILG budget for improving the quality of the national parks by means of extension and promoting of (also international) cooperation between parks, and execution of an investment program. The total ILG budget during the period 2007-2013 for national parks amounts to €25.3m.

We assume that Provinces use these resources for actual implementation of annual plans of national parks and that those plans mainly consist of measures dealing with recreation and promotion and research of the National Park. The actual management is financed by other sources (for instance SN). Therefore, we allocate no funds to the maintenance and restoration of the Natura-2000 sites to a favourable status.

5.2.6 Reconstruction of sandy areas

In the national Budget of 2008 of LNV resources are allocated to the reconstruction of sandy areas in the Southern and Eastern parts of the Netherland. The reconstruction concerns twelve areas in five Provinces: Overijssel, Gelderland, Utrecht, Noord-Brabant en Limburg. The reconstruction is focused on realising an attractive living, working and social climate by improving the spatial structure of sandy areas for the benefit of agriculture, nature, environment and water in particular. Government goals include areas in and outside the National Ecological Network, as well as reducing ammonia emission, pushing back the fragmentation of robust connections and combating desiccation. The five Provinces have formulated twelve Plans for Reconstruction with corresponding implementation programs; they should be realised in 2015. The total budget for seven years (2007-2013) amounts to €279.2m.

These reconstruction plans are complex and we have to determine how much of the afore mentioned budget can be allocated to 'Natura 2000' sites and how much of that is 'Provincial'. Therefore, we assume two measures are relevant: the transfer of intensive livestock farms and measures dealing directly

with nature. Other measures are aimed at (amongst other goals) improving environmental quality. We do not take these into account here, as we are not sure how they relate to other measures in the Dutch Rural Development Programme.

As part of measure 125 of the Dutch Rural Development Programme (POP), the Netherlands receive €51m of the EAFRD for the relocation of farms. We assume that these funds consist of €16m EU funding, with 50% additional Dutch co-financing of €16m, as well as €11m top ups and €8m private sector contributions. We assume that this part of measure 125 as a whole benefits the reconstruction. This implies that €247.3m does not originate from the EU and co-financing. We allocate that to Provinces.

To determine the share concerning relocating livestock farms and nature, we start by looking at the estimated funding needs for several themes in the reconstruction areas in the Netherlands, as presented by Boonstra et al. (2006). From that we deducted that 9.4% of the total funding needs is related to transfer of livestock farms; 30% is related to 'nature'. Based on this, we assume that €23.3m (9.4% of €247.3m) can be assigned to the relocation of farms and €74.2m to nature. This results in a budget of approximately €97.5m allocated to Provinces.

Furthermore we assume that 45% is relevant to Natura-2000 sites (as we assumed before as well, based on Broekmeyer et al., 2007). This implies that €43.9m is available for measures in Natura-2000 sites.

5.3 Additional State funding

Drawing up a Natura 2000 Management Plan is a new task for Province, therefore they obtain a financial contribution of the Ministry of ANF. For each Natura 2000 site a Province is obligated for developing a management plan, the Province receives a financial contribution. For example, the Province of Groningen must develop a management plan for two Natura-2000 sites, while the Province of Overijssel is responsible for developing management plans for seventeen Natura-2000 sites (see table 5.1).

Table 5.1 Number of Natura-2000 sites Provinces are developing management plans for, and accompanying financial contribution from the Ministry of ANF			
	Province	Natura-2000 sites	Financial contribution of the Ministry of ANF (€m)
1	Friesland	6	0.85
2	Groningen	2	unknown
3	Drenthe	8	0.95
4	Overijssel	17	2.0
5	Gelderland	12	2.3
6	Flevoland	1	unknown
7	Utrecht	2	0.1
8	Noord-Holland	12	2.4
9	Zuid-Holland	11	unknown
10	Zeeland	7	unknown
11	Noord-Brabant	8	1.5
12	Limburg	15	unknown
	<i>Total</i>	<i>101</i>	<i>15.1^{a)}</i>
a) Financial contribution of LNV to all twelve provinces. Information of five provinces could not be retrieved.			

The amount of the financial contribution has been determined by the degree of complexity of a Natura-2000 site. Subsequently the extent of complexity is determined by the size of the site (small or large area) and the plan forming process (simple or complicated). A small site (in acres) with a relative easy plan forming process receives less financial resources compared to a larger site with a rather complicated management plan forming process.

5.4 Summary

Table 5.2 summarises the results of chapter five. Provincial funds to maintain or restore the Natura-2000 network to a favourable status are estimated to amount to more than €500m from 2007-2013.

Table 5.2 **Estimated Provincial budgets concerning the maintenance or restoration of the Natura-2000 sites to a favourable status (2007-2013)**

Budget item	Budget (€m)
Nature development in the NEN	201
Improving environmental quality	137
Nature management	138
Species conservation	6
Reconstruction Natura-2000 sites	44
Natura-2000 Management Plans	15
<i>Total</i>	<i>541</i>

6 Concluding remarks

In this report, we estimate the costs of maintaining or restoring the Natura-2000 network to a favourable status in the Netherlands to be about €2,100m in the period 2007-2020 (table 6.1). This has to be regarded an underestimate, as recent information indicates that Natura-2000 sites will need additional measures to improve water quality. Moreover, information on costs of marine sites is not yet available and costs of some investments have not been taken into account, as their volume is not clear at this moment.

Table 6.1		Estimated costs of maintaining or restoring the Natura-2000 network to a favourable status in the Netherlands (2007-2020)		
Activities	Funding need 2007-2015 (€m)	Funding need 2016-2020 (€m)	Funding Need 2007-2020 (€m)	
Preparation of management plans, strategies and schemes	26	Pm	26	
Conservation management measures - maintenance and improvement of habitats' favorable conservation status	1,440-1,719	315-426	1,756-2,146	
Monitoring and surveying	10	pm	10	
Land purchase, including compensation for development rights	103	39	143	
<i>Total</i>	<i>1,579-1,858</i>	<i>356-467</i>	<i>1,935-2,325</i>	

Of the total of €2,100m some €400m is estimated for regular management and restoration management and €1,700m is needed to improve the conservation status of the Natura-2000 sites by improving water quality, reducing desiccation and deposition of nitrogen by lowering ammonia emissions from agriculture. Of all costs, some €1.7bn should be ascribed to the period 2007-2015.

Information on costs was obtained from several sources. It would be methodologically better to discount these costs to a base year. This was not possible within the period of the preparation of this report. It is doubtful whether this would have a significant effect on the magnitude of the costs. We allocated the

costs to the period 2007-2020, as we assume that the favourable conditions for the Natura-2000 sites has to be reached in 2020.

European, State and Provincial funds can contribute to Natura 2000 realisation in the Netherlands. In total we estimate that over €1,000m is available through these funds.

The European funds that have been studied are the European Agricultural Fund for Rural Development (EAFRD), the European Regional Development Fund (ERDF), the Cohesion Fund (CF), the European Social Fund (ESF) and LIFE+. Some €100m is estimated to be available from these funds (table 6.2). In general, funds have only been analysed on their operational programs (their plans). No data were available with respect to actual expenditures (except for the EAFRD). Therefore, for each European fund, assumptions were necessary to attribute the funding for Natura 2000.

Table 6.2 Estimated European, State and Provincial funds for Natura 2000 in the Netherlands (2007-2013).	
	Funding available (€m)
<i>European Funds</i>	<i>102</i>
European Agricultural Fund for Rural Development (EAFRD)	36
LIFE +	34
European Regional Development Fund (ERDF)	32
<i>State Funds</i>	<i>390</i>
Ministry of Agriculture, Nature and Food Quality	266
Ministry of Housing, Spatial Planning and the Environment	104
Ministry of Transport, Public Works and Water Management	20
<i>Provincial Funds</i>	<i>541</i>
ILG	526
Other	15
<i>Total</i>	<i>1,033</i>

These European funds are not the only funding options for Natura 2000 in the Netherlands. State Funds are estimated to contribute some €390m. Our analysis on State funds concentrates on three departments: the Ministry of Agriculture, Nature and Food Quality, the Ministry of Housing, Spatial planning and the Environment, and the Ministry of Transport, Public Works and Water Management. Ongoing habitat management in the National Ecological network by 'Staatsbosbeheer' is a major part of the funding by the Dutch State, as well as the activities planned in the 'Waddenfonds'.

Several connections between the European, State and Provincial funds exist. Provincial programmes can be financed by European, State and Provincial funds at the same time. In our method we avoided the risk of overlapping funds by creating a direct link between measures in the European Agricultural Fund for Rural Development and measures related to the Investment Budget Rural Area (ILG). This ILG comprises one budget for Provinces for the rural areas in the Netherlands. In principle, Provinces are made responsible for these funds. From table 6.2 we learn that ILG is a major funding source (some 50%) related to Natura 2000 in the Netherlands.

In analyzing European, State and Provincial budgets we faced difficulties allocating financial resources to Natura 2000. For instance, financial resources for the National Ecological Network are part of the budget within the ILG, but additional assumptions are necessary to assess resources related to Natura 2000. A more transparent allocation to Natura 2000 within these budgets would improve the analysis of cost and funds for Natura 2000.

References, bibliography and websites

References

Bal, D., H.M. Beije, M. Fellingier, R. Haveman, A.J.F.M. van Opstal and F.J. van Zadelhoff, *Het Handboek Natuurdoeltypen*. Rapport 2001/020, EC-LNV, Wageningen, 2001.

Beugelink, G.P., A. van Hinsberg, R. van Oostenbrugge, J. Clement and S. van Tol, *Hotspotkaart verdrogingsbestrijding*. Rapport 500402002, Milieu en Natuurplanbureau, 2006.

Bommel, K.H.M. van, J.J. van Dijk, P.L.M. van Horne and R. Hoste, *Analyse van additionele kosten van Natura 2000 in relatie tot ammoniak*. Aanvulling op rapport Rapport 4.06.04, projectno. 30985, LEI Wageningen UR, Den Haag, 2007.

Boonstra, F.G., W. Kuindersma and H. Bleumink, *Verwachtingen en voorlopige resultaten van de reconstructie zandgebieden*. Alterra-rapport 1441.1, ISSN 1566-7197, Alterra Wageningen UR, Wageningen, 2006.

Broekmeyer, M.E.A., E.P.A.G. Schouwenberg, M.E. Sanders and R. Pouwels, *Synergie Ecologische Hoofdstructuur en Natura 2000-gebieden. Wat stuurt het beheer?* Werkdocument 54, WOt Natuur en Milieu, Wageningen, 2007.

Commissioned by the European Commission DG Environment, *Financing Natura 2000 - Guidance Handbook*. Revised version, June 2007.

EC, *Regulation no. 614/2007 of the European Parliament and of the Council of 23 May 2007 concerning the financial instrument for the environment (LIFE+)*.

IPO, *Kosten realisatie milieue en watercondities EHS en VHR*. Stuurgroep Milieutekort: IPO, Ministerie van VROM, Ministerie van LNV, Ministerie van V&W, UvW, Den Haag, 2007.

Janssen, J.A.M., J.H.J. Schaminée, C. Aggenbach, D. Bal, N. Dankers, P. Schipper, H. Siebel and C. Smit, *Natura 2000: doelen en beheer*. Staat van

instandhouding van habitattypen van de Habitatrichtlijn. Alterra Wageningen UR, Wageningen, 2005.

Jong, J.J. de, I. Bouwma and M.N. van Wijk, *Beheerskosten van Natura 2000-gebieden*. Wettelijke Onderzoekstaken Natuur & Milieu, WOt-werkdocument 56, Wageningen, 2007.

Kuik, O., L. Brander and M. Schaafsma, *Globale Batenraming van Natura 2000 gebieden*. Instituut voor Milieuvraagstukken, VU, 18 mei 2006.

Lammers, G.W., A. van Hinsberg, W. Loonen, M.J.S.M. Reijnen and M.E. Sanders, *Optimalisatie Ecologische Hoofdstructuur, Milieu- en Natuurplanbureau*. Rapport nr. 408768003, 2005.

Ministerie van LNV, *Begroting 2008*. 2007a.

Ministerie van LNV, *Toplijsten verdrogingsbestrijding*. Brief aan de Tweede Kamer, DN 2007/1749, 2007b.

Ministerie van LNV, *Beantwoording vraag over Natura 2000 Jaarverslag LNV/AR-Rapport LNV 2007*. Brief aan de Tweede Kamer, FEZ 2008/1001, 2008a.

Ministerie van LNV, *DN. 2008/2774 12 september 2008. Kabinetsreactie op de Natuurbalans 2008*, 2008b.

Ministerie van LNV, *Jaarverslag 2007 (Verantwoording)*. 2008c.

Ministerie van Economische Zaken (EZ), *Nationaal Strategisch Referentiekader*. Ministerie van Economische Zaken, Den Haag, 2006.

Ministerie van LNV, *Natuur voor mensen, mensen voor natuur. Nota natuur, bos en landschap in de 21ste eeuw*. Bijlage bij Tweede Kamer, vergaderjaar 1999-2000, 27 235, nr. 1. Ministerie van Landbouw, Natuurbeheer en Visserij, Den Haag, 2000.

Ministerie van LNV, *Agenda voor een vitaal platteland*. Ministerie van Landbouw, Natuur en Voedselkwaliteit, Den Haag, 2004a.

Ministerie van VROM, Ministerie LNV, Ministerie van V en W en Ministerie van EZ, *Nota Ruimte. Ruimte voor ontwikkeling. Deel 4: tekst na parlementaire instemming*. Ministerie van Volkshuisvesting, Ruimtelijke Ordening en Milieu, Den Haag, 2006.

MNP, *Ecologische evaluatie regelingen voor natuurbeheer; Programma Beheer en Staatsbosbeheer 2000-2006*. MNP, Bilthoven, 2007.

Reinhard, S., A. Gaaff, W. van Deursen, P. Roza, K. van Bommel, E. Bos, J. Jager, S. Groot and L. van Staalduinen, *Additionele kosten en sociaal-economische gevolgen van Natura 2000; Een quick scan*. Rapport 4.06.04 2006, LEI Wageningen UR, Den Haag, 2006.

Terluin, I.J., A. Gaaff, N.B.P. Polman, J.H. Post, P.J. Rijk and M.A.H. Schouten, *Bergboeren in Nederland: tegen wil en dank?*Rapport 2008-023, LEI Wageningen UR, Den Haag, 2008.

Van Veen, M.P. and I.M. Bouwma, *Perspectieven voor de Vogel en Habitatrichtlijnen in Nederland*. Publicatienr. 50040900, Milieu- en Natuurplanbureau, 2007.

Plattelandsontwikkeling 2007-2013 voor Nederland (POP2). Versie 6 juni 2008.

Planbureau voor de leefomgeving (PBL), *Kwaliteit voor Later- Ex-ante evaluatie Kaderrichtlijn Water*. 2008.

RSPB, *Analysis of the Needs and EU Funding Availability for Natura 2000. Identifying the Gap to Achieving the Network's Objectives in 2007-2013*. 2007.

Rijkswaterstaat, *Programma Zuidwestelijke Delta Waterbeheer 21e eeuw, Kaderrichtlijn Water en Natura 2000. Beheer- en Ontwikkelplan voor de Rijkswateren 2010-2015 - ontwerp*. Ministerie van Verkeer en Waterstaat, december 2008.

Rijkswaterstaat, *Programma Rivieren en Kanalen Waterbeheer 21e eeuw, Kaderrichtlijn Water en Natura 2000. Beheer- en Ontwikkelplan voor de Rijkswateren 2010-2015 - ontwerp*. Ministerie van Verkeer en Waterstaat, december 2008.

Rijkswaterstaat, *Programma Noordzeekustzone, Waddenzee en Eems-Dollard, Waterbeheer 21e eeuw, Kaderrichtlijn Water en Natura 2000 Beheer- en Ontwikkelplan voor de Rijkswateren 2010-2015 - ontwerp*. Ministerie van Verkeer en Waterstaat, december 2008.

Rijkswaterstaat, *Programma IJsselmeergebied Waterbeheer 21e eeuw, Kaderrichtlijn Water en Natura 2000 Beheer- en Ontwikkelplan voor de Rijkswateren 2010-2015 - ontwerp*. Ministerie van Verkeer en Waterstaat, december 2008.

VROM, *Brief van de minister van VROM over Waddenzeebeleid. Tweede Kamer, vergaderjaar 2006-2007*, 29684 nr. 60, 22 mei 2007. Den Haag, 2007.

VROM, *19 projecten in Waddengebied krijgen geld uit Waddenfonds*, persbericht 24 april 2008. 2008.

Bibliography

Berg, E.M. van den, *Natura 2000 beheerplannen. Samenvatting Masterplan (overkoepelend plan van aanpak)*. 22 augustus 2007, Provincie Noord-Brabant, 2007.

Bommel, K. H.M. van, P.W. Blokland, J. van Dijk and G. Kruseman, *Bedrijven binnen invloedssfeer Natura 2000-gebieden*. Rapport 3.07.08, LEI Wageningen UR, Den Haag, 2007.

Bureau Buiten en Haute Finance, *Operationeel Programma voor Zuid-Nederland. Europees fonds voor Regionale Ontwikkeling 2007-2013*. Juni 2007.

Dienst Landelijk Gebied, *Natura Nieuwsbrief DLG Zuid, nr. 1*. Tilburg, 2008.

Esch, J. van, N. Hazendonk, H. van den Ancker and B. Looise, *Natuurlijke handicaps in gebieden waar landbouw gewenst is; Schetsen van de 'tweede laag' locaties*. Rapport EC-LNV nr. 2003/237, Ede, 2003.

ESF 2, *Operationeel programma*. Den Haag, mei 2007.

Gedeputeerde Staten van Gelderland, *Voorfinanciering opstellen beheerplannen Natura 2000-gebieden, voorstel aan Provinciale Staten*, PS2008-235, 2008.

Gedeputeerde Staten van Noord-Holland, *Plan van Aanpak Natura 2000 Noord-Holland. Hoe gaat de provincie Noord-Holland aan de slag met Natura 2000?* 2008.

Gedeputeerde Staten van Utrecht, *Beheerplannen Natura 2000 en TOP-aanpak, brief van College van Gedeputeerde Staten aan Provinciale Staten*. 2008.

Gelderland & Overijssel - gebundelde Innovatiekracht. Operationeel programma, EFRO 2007-2013, Regio Oost, Nederland, mei 2007.

INTERREG IVC, *Interregional cooperation programme, contributing to the European Commission initiative 'Regions for Economic Change*. CCI 2007CB163P0046, Operation Programme, 26 July 2007.

INTERREG IVB, *North Sea Region Programme 2007-2013. Operational Programme*,

INTERREG IVA, *Cross-border cooperation France-England-Flanders-Netherlands 2 seas*. Operational programme - Final Draft. 8 July 2008.

INTERREG IVA, *Operationeel programma Doelstelling Europese Territoriale Samenwerking Euregio Maas- Rijn 2007-2013*. C 2007CB163P0001.

INTERREG IV, *Operationeel Programma (OP) Grensregio Vlaanderen-Nederland 2007-2013*. 25 september 2007.

INTERREG IV, *Operationeel Programma (OP) Duitsland - Nederland 2007-2013*. 2007.

Kansen voor West, *Operationeel programma Landsdeel WestEuropees fonds voor Regionale Ontwikkeling 2007-2013*. Ingediend op 16 juli 2007.

Ministerie van LNV, *Nieuwe natuur, Brief aan de Tweede Kamer, DN 2008/441*. 2008.

Reinhard, A.J., V.G.M. Linderhof, R. Michels and N.B.P. Polman, *Landbouwkosten van aanvullende KRW_maatregelen; Achtergrondstudie voor de Ex Ante Evaluatie*. Rapport 2008-025. LEI Wageningen UR, Den Haag, 2008.

The Urban Development Network Programme URBACT II, *An exchange and learning programme for cities contributing to the European Commission Initiative 'Regions for European Change'*. (E/2007/2063 - C(2007)4454. Adopted by the EU Commission on 02 October 2007.

Transnational Territorial Cooperation (INTERREG IV) North West, *Operational programme 2007-2013*. Final draft submitted to the European Commission for approval, March, 2007.

Regiebureau POP, *Jaarverslag over de uitvoering 2007; Plattelandsontwikkelingsprogramma 2007-2013*. 2008.

Provincie Drenthe, *Investeringsbudget Landelijk Gebied, Bestuursvereenkomst 2007-2013 tussen het Rijk en de Provincie Drenthe*. 2006.

Provincie Drenthe, *Provinciaal Meerjarenplan Drenthe. Landelijk gebied*. 2007.

Provincie Drenthe, *Begroting 2009*. 2008.

Provincie Drenthe, *Voortgangsrapportage 2007 van de Bestuursvereenkomst ILG van de provincie Drenthe*. 2008.

Provincie Flevoland, *Investeringsbudget Landelijk Gebied, Bestuursvereenkomst 2007-2013 tussen het Rijk en de Provincie Flevoland*. 2006.

Provincie Flevoland, *Provinciaal Meerjarenprogramma Flevoland 2007-2013. Volop kansen in Flevoland*. 2006.

Provincie Flevoland, *Voortgangsrapportage 2007 van de Bestuursvereenkomst ILG van de provincie Flevoland*. 2008.

Provincie Friesland, *Investeringsbudget Landelijk Gebied, Bestuursvereenkomst 2007-2013 tussen het Rijk en de Provincie Friesland*. 2006.

Provincie Friesland (2006), *Provinciaal Meerjarenprogramma Landelijk Gebied Friesland 2007-2013*, Leeuwarden. 2006.

Provincie Friesland, *Voortgangsrapportage 2007 van de Bestuursovereenkomst ILG van de provincie Friesland*. 2008.

Provincie Gelderland, *Investeringsbudget Landelijk Gebied, Bestuursovereenkomst 2007-2013 tussen het Rijk en de Provincie Gelderland*. 2006.

Provincie Gelderland, *Voortgangsrapportage 2007 van de Bestuursovereenkomst ILG van de provincie Gelderland*. 2008.

Provincie Gelderland, *Natura 2000-beheerplannen Gelderland. Plan van Aanpak, afdeling Landelijk Gebied, V&H, Dienst Ruimte, Economie en Welzijn*. 2008.

Provincie Groningen, *Investeringsbudget Landelijk Gebied, Bestuursovereenkomst 2007-2013 tussen het Rijk en de Provincie Groningen*. 2006.

Provincie Groningen, *Voortgangsrapportage 2007 van de Bestuursovereenkomst ILG van de provincie Groningen*. 2008.

Provincie Limburg, *Investeringsbudget Landelijk Gebied, Bestuursovereenkomst 2007-2013 tussen het Rijk en de Provincie Limburg*. 2006.

Provincie Limburg, *Voortgangsrapportage 2007 van de Bestuursovereenkomst ILG van de provincie Limburg*. 2008.

Provincie Noord-Brabant, *Begroting 2008, nr. PS 53/07*. 2007.

Provincie Noord-Brabant, *Het ILG-gerelateerde deel van het Provinciaal Meerjarenprogramma Landelijk Gebied 2007-2013, Bijlage bij Herzien Besluit 61/06 E van Provinciale Staten*. 2006.

Provincie Noord-Holland, *Investeringsbudget Landelijk Gebied, Bestuursovereenkomst 2007-2013 tussen het Rijk en de Provincie Noord-Holland*. 2006.

Provincie Noord-Holland, *Voortgangsrapportage 2007 van de Bestuursovereenkomst ILG van de provincie Noord-Holland*. 2008.

Provincie Overijssel, *Investeringsbudget Landelijk Gebied, Bestuursvereenkomst 2007-2013 tussen het Rijk en de Provincie Overijssel*. 2008.

Provincie Overijssel, *Voortgangsrapportage 2007 van de Bestuursvereenkomst ILG van de provincie Overijssel*. 2008.

Provincie Overijssel, *Geactualiseerd plan van aanpak 'opstellen beheerplannen Natura 2000-gebieden provincie Overijssel'*. 2008.

Provincie Utrecht, *Investeringsbudget Landelijk Gebied, Bestuursvereenkomst 2007-2013 tussen het Rijk en de Provincie Utrecht*. 2006.

Provincie Utrecht, *Voorjaarsnota 2008*. 2008.

Provincie Zeeland, *Investeringsbudget Landelijk Gebied, Bestuursvereenkomst 2007-2013 tussen het Rijk en de Provincie Zeeland*. 2006.

Provincie Zeeland, *Voortgangsrapportage 2007 van de Bestuursvereenkomst ILG van de provincie Zeeland*. 2008.

Provincie Zuid-Holland, *Investeringsbudget Landelijk Gebied, Bestuursvereenkomst 2007-2013 tussen het Rijk en de Provincie Zuid-Holland*. 2006.

Provincie Zuid-Holland, *Voortgangsrapportage 2007 van de Bestuursvereenkomst ILG van de provincie Zuid-Holland*. 2008.

Websites

ec.pa.eu/regional_policy/sources/docoffic/official/deci_en.htm

ec.pa.eu/regional_policy/funds/cf/index_nl.htm

ec.pa.eu/regional_policy/policy/fonds/index_nl.htm

www.agentschapszw.nl/

www.brabant.nl

www.drenthe.nl/natura2000/

www.euregio-mr.org/emr_site/site_nl/emr/home.php

www.ez.nl/dsresource?objectid=155692&type=PDF

www.go-oostnederland.eu/

www.grensregio.eu/programma.aspx

www.interregemr.eu/site_nl/interreg_programm/interreg_programm.php
www.kansenvoorwest.nl/
www.natura2000beheerplannen.nl
www.noord-holland.nl
www.op-zuid.nl/
www.provincie.flevoland.nl
www.provincie-utrecht.nl
www.regiebureau-pop.eu/
www.regiebureau-pop.eu/nl/info/4/16/basisdocumenten/
www.rlg.nl/cap/netherlands.html
www.rijksbegroting.nl/2009/begrotingsvoorstel_behandeling/begroting,kst900016b_11.html
www.senternovem.nl/interreg/
www.senternovem.nl/life/
www.senternovem.nl/life/introductie_life/natuur_en_biodiversiteit.asp
northsearegion.eu/ivb/content/show/&tid=38
www.snn.eu/
www.snn.eu/sjablonen/1/infotype/webpage/view.asp?objectID=625
www.territorial-cooperation.eu/seiten/downloads.cfm
www.vewin.nl/nieuws/Pages/Waterleidingstatistiek2007.aspx
www.vrom.nl/pagina.html?id=2706&sp=2&dn=w758

LEI Wageningen UR develops economic expertise for government bodies and industry in the field of food, agriculture and the natural environment. By means of independent research, LEI Wageningen UR offers its customers a solid basis for socially and strategically justifiable policy choices.

LEI is part of Wageningen University and Research Centre, forming the Social Sciences Group with the department of Social Sciences.

More information: www.lei.wur.nl

