

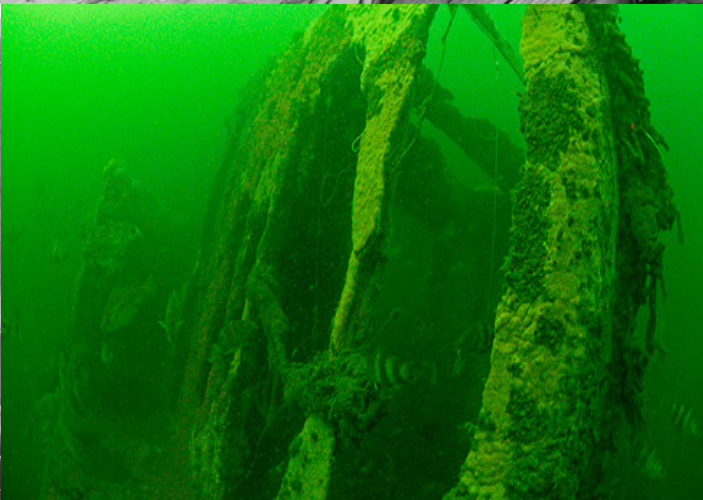


THESIS



Underwater Cultural Heritage

New perspective on managing cultural heritage in the Oostvoornse meer



THESIS

UNDERWATER CULTURAL HERITAGE

A new perspective on managing underwater cultural
heritage in the Oostvoornse meer

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Executive summary

The initial objective of this research project was to find out the possibility of opening up shipwrecks in the Oostvoornse meer - a lake located in the province of Zuid-Holland - to the general public. Without further ado, the most preferable method of opening up these shipwrecks was to leave them in situ. In situ means that archaeological objects should remain in the same place as they were originally discovered. Leaving shipwrecks in situ also goes in line with the Convention of Malta, which in the Netherlands was accepted and converted to the Dutch law of Monuments (Monumentenwet).

With this in mind, the researcher had to find a way to leave the shipwrecks on their original location, however making sure that preservation had to be carried out sufficiently. In order to obtain information concerning exactly this, the researcher has conducted several interviews. The interviewees were either experts concerning shipwrecks, conservation in general, the Oostvoornse meer and archaeology. Having talked with experts on these specific subjects in combination with desk research on the internet or books, the researcher was able to grasp a good overview on the possibilities at the lake and how conservation should be carried out.

Shipwrecks in general are vulnerable objects which should be treated with care and respect. This however, is not always the case as some divers sometimes purposely destroy the shipwrecks at the Oostvoornse meer. It is also exactly for this reason that the government has not opened up the shipwrecks to the general public, as conservation management was not yet researched nor put into action.

Efficient management is the key to success when wanting to open up a cultural heritage site to the general public. Research was needed in order to find out how management could play a role when wanting to gain respect from people in general and divers in particular, to the shipwrecks located at the Oostvoornse meer. Three important findings have been discovered.

1. It will be highly recommendable to inform people on what they can find in the Oostvoornse meer. Simple things, such as signposts, should be placed around the Oostvoornse meer and a kind of visitors' centre where pictures and objects are shown of the shipwrecks should also be taken into consideration. At the moment, divers - or any other recreational visitor - are not aware of the shipwrecks, their historical background or their ethical value. The only way of people being able to gain respect for the shipwrecks is by informing them on what can be found in the first place; the chances of people obtaining respect for the shipwrecks increases, and so the chance of people wanting to destroy the shipwrecks decreases
2. One other important recommendation is to start up a foundation which will be in charge of the conservation of the shipwrecks. They will do a few fieldwork trips a year in order to monitor the possible degrade of a shipwreck. This foundation should also be in charge of informing people on the latest developments. This could be by means of flyers or yearly presentations
3. The third and last recommended implementation to the Oostvoornse meer is to open up at least half of the lake to the general public, while the other half should become a part where only NAS qualified divers can go. The part where everyone can go should become an underwater park and should then also be used as a depot where shipwrecks from other parts of the Netherlands can be placed. The part where people can only go with a permit and NAS certificate should be promoted as a more special diving spot where people will have to do a bit more effort in order to be allowed to go diving there. NAS qualified divers could then also be used as volunteers for the foundation when certain projects are to be realised.

All in all, the Oostvoornse meer certainly has potential of becoming a nationally, and maybe even internationally, renowned place for underwater cultural heritage. If all local stakeholders are to be involved and consistent management is to be implemented, then the Oostvoornse meer's success can be realised.

Foreword

After having thoroughly considered all different kinds of subjects for writing my thesis, I stumbled upon the topic of cultural heritage. Cultural heritage has always intrigued me in ways of how management copes with the complex thin line between developing a cultural heritage site and conserving a cultural heritage site. It is exactly this thin line that has formed my interest in cultural heritage and so the subject of the thesis was created.

Subsequent to having contacted UNESCO, considering them to be the most obvious candidate, I came into contact with the State Service of Cultural Heritage, which is part of the Dutch ministry of Culture, Science and Education. Within this department I came across Mr. Manders who is specialised in underwater cultural heritage and archaeology. Following a meeting I had with Mr Manders, it soon became clear that he was able to provide me with a proper and very interesting subject; the underwater cultural heritage found in the Oostvoornse meer.

I feel privileged to having been able to interview such interesting people who have all helped me greatly during this research project. At first, I was concerned about the fact that I don't hold an archaeological background, however this may have been an actual advantage as I started this project being completely objective.

I sincerely hope that this new perspective on management could contribute to the developments at the Oostvoornse meer, because I certainly believe that the Oostvoornse meer could become an important and special cultural heritage site.

I hope you will enjoy reading this report.

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Then I would like to thank all the people who I have interviewed for this thesis. They have taken the time to share their knowledge and expertise with me, which without it, there wouldn't have been a report in the first place.

Special thanks go to Frank Stoop who has been very patient and helpful with all my questions. Especially his patience in my endless requests for more information is highly appreciated.

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Then, Donna Billingham, who has taken the liberty and time to read and comment on this entire report; I really appreciate it.

All my friends and family, who probably have heard nothing else but 'my thesis' stories; thanks for your patience and support.

Last but not least, Volkert Hageman – van Dril, who has carried out the statistics for me. I couldn't have done it otherwise, so thanks a lot!

Thanks to you all!

Terminology

- UNESCO: United Nations Educational, Scientific and Cultural Organisation¹
- Underwater cultural heritage: means all traces of human existence having a cultural, historical or archaeological character which have been partially or totally under water, periodically or continuously, for at least 100 years...
(Unesco, 2001 convention, art. 1 Para. 1)
NOTE: The Netherlands has a 50-year minimum
- Commissioning client: Mr. Manders from the underwater cultural heritage department of the ministry of science, culture and education
- In situ: In archaeology, *in situ* refers to an artefact that has not been moved from its original place of deposition
- Qualitative research: Qualitative research seeks out the 'why', not the 'how' of its topic through the analysis of unstructured information – things like interview transcripts, emails, notes, feedback forms, photos and videos. It doesn't just rely on statistics or numbers, which are the domain of quantitative researchers²
- Quantitative research: Quantitative research is used to measure how many people feel, think or act in a particular way. These surveys tend to include large samples - anything from 50 to any number of interviews³
- Primary sources: A primary source is a document or physical object which was written or created during the time under study. These sources were present during an experience or time period and offer an inside view of a particular event and are original⁴
- Secondary sources: A secondary source is a second-hand account about people, events, topics or places that is based on what some other writer has experienced. Good examples of secondary sources are books, newspapers, pamphlets, encyclopaedias and other materials in which information has been gathered for you.

¹ www.unesco.org (4th of March 2010)

² <http://www.qsrinternational.com/what-is-qualitative-research.aspx> (4th of March 2010)

³ http://www.marketresearchworld.net/index.php?option=com_content&task=view&id=11&Itemid=64 (4th of March 2010)

⁴ <http://www.princeton.edu/~refdesk/primary2.html> (4th of March 2010)

- Desk research: Gathering and analyzing information, already available in print or published on the internet⁵
- Critical literature review: A literature review is a “critical analysis of a segment of a published body of knowledge through summary, classification, and comparison of prior research studies, reviews of literature, and theoretical articles.” (Wisconsin)
- ICOMOS: International Council on Monuments and Sites
- RCE: State Service of Cultural heritage (Rijksdienst Cultureel Erfgoed)
- LWAOW: National working group of archaeology underwater (Landelijke Werkgroep Archeology Onder Water)
- GZH: Green service of the province of Zuid-Holland (Groenservice Zuid-Holland)
- NAS: Nautical Archaeology Society
- NAS course: A course focused on archaeology in combination with shipwreck diving
- UCH: Underwater Cultural Heritage

⁵ <http://www.businessdictionary.com/definition/desk-research.html> (4th of March 2010)

Chapter 1 Introduction

This chapter exists to define the subject of this research, the background, the commissioning client and the objectives that were once made. It is important to have a clear view on what this research was all about and what the aim of the research was. Logically, this chapter will start off with the nature of the assignment.

1.1 The nature of the assignment

The subject of this research project is concerned with cultural developments focused on the underwater cultural heritage site the 'Oostvoornse meer' in the Netherlands. This lake, located on the most southern part of the province of Zuid-Holland, is the hub of cultural heritage objects, which are all of great archaeological value. The aim of the

research was to seek the possibilities of making in situ preserved underwater shipwrecks accessible to the public and to explore not only the possibilities for this development, but also to find the positive and possible negative effects this development might have on the management of this underwater cultural heritage site.



Image 1: Map of part of province of Zuid-Holland; A =

Oostvoornse meer (source: Google maps)

1.1.1 The Oostvoornse meer

This immense lake with 64 million cubic meters of water and part of a nature area of in total 320 hectares was originally a shipping route called the 'Maasmonde'. This route used to be a connection route between Schiedam and the Maassluis.⁶ When in 1966 a project called 'Maasvlakte 1' was realised – one part of this project was to build a dam - this connection route was closed resulting into the creation of the lake. The connection route consisted of 2 parts; a higher deeper part, and the lower shallower part. It is exactly at this lower shallower part where many ships sank, hence the many shipwrecks found in the Oostvoornse meer.



The Oostvoornse meer is a perfect spot for recreational activities.⁷ On the picture you can see the lake in its totality, including the direct surrounding of the lake. At the bottom right of the picture, you can see the nature reserve which is also a protected bird area. Image 2: Picture taken from above of the Oostvoornse meer

(source: NL – NASA)

⁶ <http://www.oostvoornsemeerwij.nl/teksten/oostvoornsemeer2009-2010.pdf> (27th of May 2010)

⁷ http://www.natuurlijkooostvoornsemeer.nl/lib/media/uploaded/ovm_factsheet.pdf (27th of May 2010)

Besides the opportunity to go bird watching, walking and cycling – there are biking and walking paths all around the lake – there are also many fishermen active in the lake, kite surfers, divers and the general tourist enjoying the beach and water on a sunny day.⁸

Looking at the fact that the lake used to be part of the sea, the water was salt and so the quality of the water in general and the view underwater in particular was good and clear. However, as the salt evaporated more and more, the level of salt in the water decreased resulting in the deterioration of the quality. This didn't just have an impact on the flora and fauna found in and around the lake, but also on the shipwrecks on the bottom of the lake. As more people were witnessing this deterioration, in 1973 they decided to add 1, 2 million cubic meters of salt water to the lake, making an average of 12.000 mg of salt per litre.⁹ This worked, but only until the end of 2003 when the level of salt was again decreased to an average of 4.700 mg per litre, meaning that the critical level of 4.000 mg per litre was almost reached.¹⁰ When an average of 4.000 mg per litre is measured, there can be high risk of the blue algae starting to develop and a decrease in the general flora and fauna in the lake. One indication of this deterioration in the fauna was the fact that the shrimps were disappearing resulting into a loss of food for the trout.¹¹ Something needed to be done.

In November 2007 the project “Kwaliteits Impuls Oostvoornse Meer” started off. This project was initiated in order for the lake to get a constant flow of salt water; an 800 metres long pipeline pumping water from the Beerkanaal straight into the Oostvoornse meer. Anno 2010, this project has successfully been implemented and so the flora and fauna in the Oostvoornse meer are safe. It must be stated that the increase in salt might have had a positive influence on the flora and fauna, however the shipwrecks at the Oostvoornse meer are not profiting from this development, as shipworms are now able again to live on the shipwrecks. Shipworms can form a mayor threat to the shipwrecks, as they are able to destroy entire wooden structures.¹²

⁸ Observation 1: Oostvoornse meer 6th of May 2010

⁹ <http://www.natuurlijkoostvoornsemeer.nl/?fld=17> (27th of May 2010)

¹⁰ <http://www.rom-rijnmond.nl/archief/actief/0046/0004.html> (27th of May 2010)

¹¹ <http://www.rom-rijnmond.nl/archief/actief/0046/0004.html> (27th of May 2010)

¹² <http://www.liverpoolmuseums.org.uk/nof/top/shipworm.html> (8th of June 2010)

1.2 Commissioning client

The commissioning client for this research was the state service of cultural heritage, however specifically carried out for Mr. Manders. Mr. Manders is a maritime archaeologist at the state service of cultural heritage which is part of the ministry of education, culture and science.

Mr. Manders studied underwater archaeology and maritime history in Leiden. In 1990 he started off working for the State Service of Cultural Heritage and its predecessors (ROB & RACM). At first, Mr. Manders was a member of the archaeological diving team of the State Service; a team concerned with doing research on shipwrecks in the Netherlands. However, for the past few years he has been mainly involved in big European projects regarding under water archaeology. Examples of these projects are MoSS (www.mossproject.com), bacpoles (www.bacpoles.nl) and more recently MACHU (www.machuproject.eu) and WreckProtect (www.wreckprotect.eu). Besides this he is also a teacher at a private bachelor university called Saxion Next, at the University of Leiden and the UNESCO field school in Thailand. Mr. Manders is an expert in management concerning underwater cultural heritage and the protection of shipwrecks in situ.

Mr. Manders works in the department of 'Beleid' (policy). Within this department he is in charge of the policy concerning maritime.

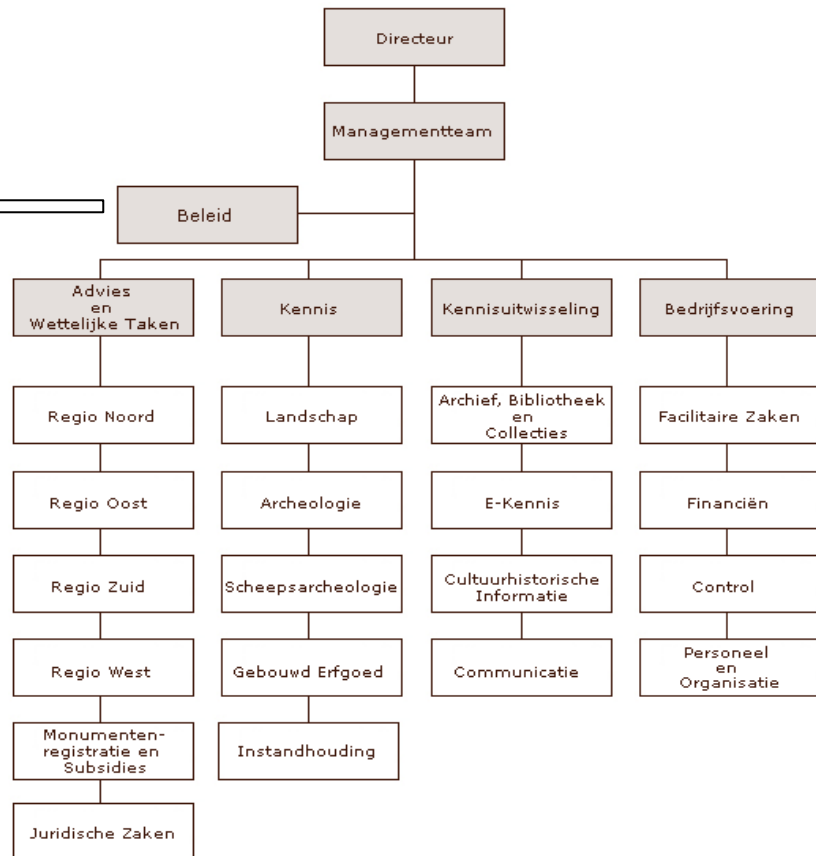


Image 3: Organogram of cultural heritage state service¹³

¹³ <http://www.cultureelerfgoed.nl/organisatie/organogram> (26th of February 2010)

1.3 Background and immediate cause of the assignment

Underwater cultural heritage encompasses all traces of human existence that lie or were lying under water and have a cultural or historical character (UNESCO). The underwater world is quite a world of its own and as oceans and seas hold most of the planet's surface, there are still many secrets yet to be discovered. Shipwrecks can survive on the bottom of the ocean floor for centuries as is shown in the following examples:

- The Avondster, a 17th century VOC shipwreck found in Sri Lanka (article 2)
- The VASA, which is the world's only surviving 17th-century ship which has been hauled to shore. It is still intact and now one of the foremost tourist sights in the world. The ship is displayed in a purpose-built museum in Stockholm, Sweden¹⁴
- Mary Rose, which was built between 1509 and 1511 and was one of the first ships able to fire a broadside and was a firm favourite of King Henry VIII.¹⁵ She was raised to shore in 1982 after having been discovered in 1971. She is now based in Portsmouth Historic Dockyard where they are working on building a purpose-built museum for the Mary Rose.
- Last but not least, the Titanic. The RMS Titanic, which sank in 1912, was a British registered four funnelled ocean liner built for the transatlantic passenger and mail service between Southampton and New York.¹⁶ The wreck of the Titanic was discovered in 1985. The Titanic has never been raised to shore and so it is still at its original location. Besides the natural decay of the shipwreck, many scientists are worried about the condition of the Titanic now that tourists can 'visit' the shipwreck with submersibles.

Although the water (and the soft sediments that make up the seabed) has protected shipwrecks and built structures for centuries, due to several natural and human impacts - for example the improvements in diving technology which have made them more accessible and therefore increasingly vulnerable - there is a need to re-evaluate how to manage such sites. UNESCO states that many countries are managing their cultural heritage on land appropriately, however much of the underwater cultural heritage remains unprotected (article 1). Therefore UNESCO's aim is to improve the

¹⁴ <http://www.vasamuseet.se/InEnglish/about.aspx> (10th of February 2010)

¹⁵ <http://www.maryrose.org/index.html> (10th of February 2010)

¹⁶ <http://www.encyclopedia-titanica.org> (10th of February 2010)

conservation of shipwrecks in situ, meaning that preservation management should preferably be done at the shipwrecks' original location, rather than excavating the shipwreck in order to bring it on-land to the people. Because of this need which exists world-wide, UNESCO started an underwater cultural heritage discussion which, after 4 years of negotiations and meetings, ended with signing a petition at the 2001 convention. This 2001 convention was signed by various countries around the world; however The Netherlands was not one of them. In 2009 an official ratification of this convention followed which was, again, not signed by the Netherlands. The Netherlands believed, and still believes that their underwater cultural heritage program is sufficient and has proven to be working well. Another reason why the Netherlands did not sign this ratification, was because they believed that the 2001 convention of UNESCO was contradictory towards the UNCLOS (United Nations Law of the Sea, 1986)

Let's go more in-depth on the shipwrecks found in the Netherlands. On the bottom of the sea in Netherlands' waters more than ten-thousand shipwrecks are to be found, however most of them are only known to a small Dutch diving community. Only little information about these shipwrecks is revealed to the public simply because we don't know. Investment for the protection and research in UCH is low, because the government is concerned about the (possible) negative impacts tourists/people can have on the sites when visits are made. This all makes sense because it is certainly not advisable to just simply reveal the location of the shipwrecks, as uncontrolled visits could cause harm to the sites. If the government does want to open up the sites to the general public, an extensive research is needed on how to conserve the sites and how to manage the visits. The desire the government had of opening up the shipwrecks was also the direct cause of this research project.

1.4 Trends and developments

There are numerous examples of shipwrecks which are already open to tourists. These are either in situ attractions as well as shipwrecks recovered from the ocean floor and brought to a museum. The following examples apply:

- The Vasa museum. This museum is a typical example of entrepreneurs bringing a shipwreck to the people. In 1961, after 5 years of hard work, the Vasa was finally lifted to the surface with press coverage from all over the world. In 1962 the Vasa was first put in a temporary museum where archaeologists were set to work to discover '*the biggest single object that has ever been preserved*'.¹⁷ By means of replacing the water by a special chemical substance, the wooden objects were prevented from shrinking. Finally, in 1990 the Vasa museum was inaugurated featuring the world's only surviving 17th century ship. The museum is now one of the most famous tourist attractions in Sweden
- An example of an in situ shipwreck tourist attraction is the Antilla, a German freighter wreck, located just off the shore of Aruba, which is one of the islands of the Dutch Antilles. Although the wreck is not as old as some other 17th/18th century shipwrecks elsewhere in the world, it certainly does possess a rich history and is used as a tourist attraction. During WWII the Antilla's main function was to supply other German submarines with all sorts of things. The Antilla was also once called the Ghost ship as the allies were never able to locate it.¹⁸ She was intentionally sunk by the German crew in order to avoid getting captured by the Dutch who had already asked them to surrender. Now the shipwreck is a diving haven. The dive can be made by both beginners as well as experienced divers. The Antilla is still almost completely intact and there are still many unlocked doors inside the wreck, making the chance to discover something new quite big. Besides the Antilla, there are many other shipwrecks to be found around Aruba, which are all accessible for divers. There are many travel agencies offering trips to one or more shipwrecks, which makes this a typical example of an in situ shipwreck tourist attraction

¹⁷ <http://www.vasamuseet.se/sitecore/content/Vasamuseet/InEnglish/History/salvaging.aspx> (10th of February 2010)

¹⁸ <http://www.shipwreckexpo.com/tsarubashipwrecks.htm> (10th of February 2010)

- Another example of an in situ shipwreck site which was created for touristic purpose can be seen in China. In Guangdong is China's first underwater museum. They built a giant underwater museum to preserve and exhibit an ancient shipwreck. The museum, the first of its kind in the world, is to contain a sunken ship more than 800 years old and its treasures. The Guangdong provincial government has allocated £10 million to building a five hall underwater museum to preserve the wreck.¹⁹ The museum consists of 4 parts, where one part is the most astonishing; an immense pool where archaeologists are working on an ancient shipwreck. This pool serves its purpose of protecting the shipwreck by keeping it underwater, as exposing it to air could damage the ship. Visitors can see from up-close just how archaeologists are set to work and the details of the shipwreck itself by looking through windows down below.

Obviously there are many more examples of underwater museums, however the three described above give a good perspective of all possibilities. They are typical examples of trends which are all happening right now and have been kept in consideration during this research. Besides these trends there are also examples of developments in the diving world, which have also been considered by the researcher. These developments have a direct influence on underwater cultural heritage. A typical example of what is happening in the diving world is the devices available to the general diver. These technological appliances are of such high quality, that they are often better than the devices used by the professionals.

All aspects described above have been of great relevance to the research as it was always recommended to keep track of the latest trends and follow up on the latest developments. By keeping these trends in mind, the researcher hoped to create a report which would most likely appeal to all stakeholders involved and would be of interest to people interested in this specific subject.

1.5 Objective of research

The objective of this research was:

¹⁹ http://www.dailytimes.com.pk/default.asp?page=2007%5C11%5C20%5Cstory_20-11-2007_pg9_7 (8th of June 2010)

Finding the possibilities of opening up the shipwrecks in situ to the general public, keeping in mind the appropriate preservation and management of the sites.

The reason why the focus was only on opening the sites in situ rather than bringing the shipwrecks to the people is because the government as well as UNESCO has given their preference to this option.

The following steps have been taken into consideration:

- Are shipwrecks underwater [and in situ] interesting enough to make it a tourist attraction?
- Who are the stakeholders involved in the Oostvoornse meer?
- How to combine heritage with tourism without the risk of damaging the site?
- Who will take care of preserving the site?
- Will the enlarged accessibility of a site have a spin-off effect in the acceptance of in situ preservation of archaeological sites as an important management tool?
- Is it financially possible to open up shipwrecks to tourists whilst taking care of the preservation of the sites?

1.5.1 Delineation

At first, the researcher was planning on focusing only on one shipwreck, as focusing on more was thought to be too much work given the small amount of time. However, after having conducted the first interviews, the researcher decided to focus on the lake in its totality, as the entire lake IS the cultural heritage site; not just one shipwreck.

1.5.2 Objective relevance

What exactly was the relevance of the objective to the stakeholders involved? A thesis is never made by not having considered the relevance of the subject. That is why it is important to look at the subject from different perspectives, as is done below:

Practical: An important outcome of the research is the fact that the commissioning client is able to get an advice from a third, and so more objective, person; the researcher. The following statement has been made by the commissioning client before the research started: *“I hope to find out which effects the opening up of shipwrecks (to the general public) might have on the management and preservation of*

the underwater cultural heritage. I would also like to see whether or not the sites have the possibility to be financially self-reliant.”

This objective has been the main path during the entire research, as, logically, the objective of the commissioning client was the same as the one from the researcher. That is why the researcher can state that the practical relevance of this report is the outcome of the research, as the outcome goes hand in hand with the objective of the commissioning client.

Societal: The society in its broadest sense could also benefit from this report. The reason why they could is simply because the government is interested in opening up cultural heritage sites to the general public (or society) which means that more knowledge can be spread and more people can enjoy the Dutch cultural heritage. As this was the aim of this research, this report can be used as a guideline on other similar scenarios. Obviously, every situation should be treated individually, however it is possible for other cultural heritage managers to use this report as a tool on how to deal with underwater cultural heritage.

Theoretical: This report is written with the idea of introducing a new perspective on underwater cultural heritage management in the Oostvoornse meer. It could well be that the perspective described in this report could be used as a new theory. This theory could have relevance to future underwater cultural heritage managers.

Chapter 2 Critical literature review

The critical literature review was highly important during this research, as this part was used to portray the different theories used in order to gain knowledge on the subject of underwater cultural heritage and the Oostvoornse meer. The critical literature review is divided into different subjects, according to the relevance it had to the research.

2.1 Underwater cultural heritage management

This subject has been highly relevant when wanting to know how to preserve shipwrecks. Although there were no articles or books about the protection of the shipwrecks in the Oostvoornsemeer, there was a lot of information on how shipwrecks in other parts of the world are being protected.

→ Articles

1. **UNESCO**; *The UNESCO convention on the protection of the underwater cultural heritage*

This article is about the 2001 convention which was concerned with the protection of the underwater cultural heritage. After 4 years of debating and meeting, the UNESCO finally came with a petition in 2001. Holland didn't sign this 2001 convention, nor did they sign the ratification in 2009. Although Holland never signed this convention, this article has helped this research with information on how to manage and protect underwater cultural heritage.

2. **M. R. Manders, W. M. Chandraratne, A. M. A. Dayananda, R. Muthucumarana, K. B. C. Weerasena and K. D. P. Weerasingha**; *The physical protection of a 17th century VOC shipwreck in Sri Lanka*

This article was used as a kind of advisory report. The researcher has used this article to find out how physical conservation is carried out. As the researcher started off not having a lot of knowledge about maritime archaeology, the article was used to get the basics about protection. This article has only been used for learning purposes, meaning that the actual content has not been used, due to the relevance (as the article is about the protection of a shipwreck in Sri Lanka

where the water conditions and climate conditions are completely different from those here in the Netherlands).

3. Machu; Machu report no. 1 - A maritime research project funded by the European Union Culture 2000 programme.

This article is about managing cultural heritage underwater. MACHU (Managing Cultural Heritage Underwater) is a three year project between 7 countries sponsored by the Culture 2000 programme of the European Union. The primary goal of the MACHU project is to find new and better ways for an effective management of our underwater cultural heritage and to make information about our common underwater cultural heritage accessible for academic purposes, policy makers and for the general public. The Machu project stands for a universal way of managing cultural heritage underwater; sharing information with other countries (a GIS system). The overall idea of this report has been used, as this report gives proof of the need and want of governments, archaeologists and other parties involved in the opening up of shipwreck sites to the general public. They advice everyone to share everything; this also in order to gain respect from the general public.

4. Machu; Machu report no. 2; a maritime research project funded by the European Union Culture 2000 programme.

Number 2 of this maritime research project. This is a follow up on the article described above, however more in detail. The second and last part of this article has been very important and useful to this research project, as it describes how to deal with different stakeholders. As the researcher has conducted several interviews, it soon became clear that the relationship between archaeologists and divers is not good. This phenomenon is also mentioned in this article, which has given the researcher another source of information and proof. This part about divers and archaeologists can be found on page 36.

5. ICOMOS, Charter on the protection and management of underwater cultural heritage, 1996

This article describes a few guidelines on how to deal with the management of cultural heritage underwater. It has given the researcher some advice on how to start a project such as the one at the Oostvoornse meer. The fact that the first principle in this article starts with: "*Preservation of underwater cultural heritage in situ should be considered as a first option*", gave the researcher a good starting point of this project.

→ Websites

- <http://www.machuproject.eu>

A website about managing cultural heritage underwater. There are several reports to be found on the website (which is described above).

- www.wreckprotect.eu

As shipwrecks underwater are decaying sometimes rapidly, there was the need to look at which techniques are to be used in order to avoid this from happening. Examples of decaying shipwrecks can be found on this website, which have helped the researcher to find the obstacles one finds when dealing with underwater cultural heritage. It must be stated that the actual physical protection of the shipwrecks at the Oostvoornse meer has not been considered by the researcher, as this report is not serving its purpose of being an archaeological technical report.

2.2 Different possibilities of opening up shipwrecks

In this research project the researcher was dealing with how to open up shipwrecks to the general public, however with the preservation of the shipwreck being kept in mind. The numerous examples of shipwrecks which are already open to tourists have been used by the researcher as a starting point and as a way of imagining the endless possibilities. These examples are either in situ attractions as well as shipwrecks recovered from the ocean floor and brought to a museum. All of these possibilities have been looked at closely. It must be mentioned that the most preferable method from the start, was keeping the shipwrecks in situ. This was chosen because it was the wish of the commissioning client and because it goes in line with the convention of Malta (stating that underwater cultural heritage should be kept at its original

location²⁰). However, it was still important to consider all possibilities. The following examples have been taken into consideration:

- The Vasa museum. This museum is a typical example of entrepreneurs bringing a shipwreck to the people. In 1961, after 5 years of hard work, the Vasa was finally lifted to the surface with press coverage from all over the world. In 1962 the Vasa was first put in a temporary museum where archaeologists were set to work to discover '*the biggest single object that has ever been preserved*'.²¹ By means of replacing the water by a special chemical substance, the wooded objects were prevented from shrinking. Finally, in 1990 the Vasa museum was inaugurated featuring the world's only surviving 17th century ship. The museum is now one of the most famous tourist attractions of Sweden.

Source: <http://www.vasamuseet.se/InEnglish/about.aspx>

- An example of an in situ shipwreck tourist attraction is the Antilla (a German freighter wreck) located just off the shore of Aruba, which is one of the islands of the Dutch Antilles. Although the wreck is not as old as some other 17th/18th century shipwrecks elsewhere in the world, it certainly does possess a rich history and is used as a tourist attraction. During WWII the Antilla's main function was to supply other German submarines with all sorts of things. The Antilla was also once called the Ghost Ship as the allies were never able to locate it.²² She was intentionally sunk by the German crew in order to avoid getting captured by the Dutch who had already asked them to surrender. Now the shipwreck is a diving haven. The dive can be made by both beginners as well as experienced divers. The Antilla is still almost completely intact and there are still many unlocked doors inside the wreck, making the chance to discover something new quite big. Besides the Antilla, there are many other shipwrecks to be found around Aruba, which are all accessible for divers. There are many travel agencies offering trips to one or more shipwrecks, which makes this one a typical example of an in situ shipwreck tourist attraction

Source: <http://www.shipwreckexpo.com/tsarubashipwrecks.htm>

²⁰ <http://www.kvce.nl/rubrieken/rubriek/wetenregelgeving/verdragvanmalta> (19th of June 2010)

²¹ <http://www.vasamuseet.se/sitecore/content/Vasamuseet/InEnglish/History/salvaging.aspx> (10th of February 2010)

²² <http://www.shipwreckexpo.com/tsarubashipwrecks.htm> (10h of February 2010)

- Another possibility of opening up a shipwreck site to tourists can be seen in China. In Guangdong is China's first underwater museum. They built a giant underwater museum to preserve and exhibit an ancient shipwreck. The museum, the first of its kind in the world, is to contain a sunken ship more than 800 years old and its treasures. The Guangdong provincial government has allocated £10 million to building a five hall underwater museum to preserve the wreck.²³ The museum consists of 4 parts, where one part is the most astonishing; an immense pool where archaeologists are working on an ancient shipwreck. This pool serves its purpose of protecting the shipwreck by keeping it underwater, as exposing it to air could damage the ship. Visitors can see from up-close just how archaeologists are set to work and the details of the shipwreck itself by looking through windows down below.

Source: <http://news.cultural-china.com/20091225105709.html>

There were many other examples of shipwreck possibilities, however the three described above give a good perspective on the three different methods:

- Extracting a shipwreck from the water and placing it in a museum
- Keeping a shipwreck in situ
- Extracting a shipwreck from the water and then placing it back in water where the shipwreck will be better protected.

→ Other relevant websites

- www.mossproject.com

The Moss project is set up with the aim of monitoring, safeguarding and visualizing shipwrecks. The general purpose of this project is to get the general public to obtain interest in the maritime life.

2.3 The Oostvoornsemeer

The Oostvoornsemeer has a lot to offer. There are many bike and walking routes and of course the possibility to go shipwreck diving. Below you will find some sources

²³ http://www.dailytimes.com.pk/default.asp?page=2007%5C11%5C20%5Cstory_20-11-2007_pg9_7 (8th of June 2010)

about the Oostvoornsemeer which have been used for background information about the tourism which already exists around the lake.

→ Articles

6. Natuurlijk Oostvoornse meer, Project of 'Kwaliteitsimpuls Oostvoornse meer, Havenbedrijf Rotterdam N.V

This article has given the researcher a good overview on how the Oostvoornse meer was created, what can be found, which activities can be carried out and which developments have been going on. At first the researcher thought that the salt-water supply at the Oostvoornse Meer described in this article, was also carried out for the sake of the shipwrecks, however nothing could be further from the truth; the shipworm is able to live on the shipwrecks again with this salt water increase and so they destroy the shipwrecks.

7. Provinciaal blad van Zuid-Holland, Recreatieschap Voorne-Putten-Rozenburg, 2007

This article gives an overview of all the rules and regulations at the Oostvoornse Meer; what is allowed and what is not allowed stated by the province of Zuid-Holland. This article was used for the researcher to know which ideas could be possible and which ones could not be possible to implement.

→ Websites

- <http://www.natuurlijkoostvoornsemeer.nl>

The website of Natuurlijk Oostvoornse meer can be described as the 'mother' of the article mentioned above. The website contains a lot of information on the environment where the research has taken place and has given the researcher a starting point of getting into contact with policy makers.

- <http://www.oostvoorne.org/?pagina=oostvoornse%20meer>

This site is the website of Oostvoorne itself. A lot of information can be found on what to do around the Oostvoornsemeer. This website was mainly used for getting background information on the Oostvoornse meer.

- <http://www.duikentriton.nl/oostvoornsemeer.htm>

This association of divers is highly active with shipwreck diving all over the Netherlands. Their statement is to make people realise that not only in the Caribbean is diving fun; also in Holland it is beautiful and well-worth visiting. As will be mentioned in the chapter about the research methodology, the researcher has not carried out a target group analysis, so this website has not been used for target group purposes. However this website has proven to be useful in order to gain information on the background of the lake.

2.4 Diving communities

Because the researcher has not carried out a target group analysis, it wasn't necessary to contact as many diving clubs as possible. However, there was still one diving centre which has played an important role during this research project.

→ Websites

- <http://www.divecentercapelle.nl/index.php>

This diving community is highly active in the Oostvoornse meer, which is why they have played an important role during this project. They were the ones who were able to provide the researcher with more information on the kind of diver that is found at the Oostvoornse meer, on the quality of the shipwrecks, the quality of the water and other special diving possibilities. Besides this they also provided the researcher with information on what could be possible to do with the Oostvoornse meer and which dangers to keep into consideration; e.g. the bad intention divers.

2.5 Cultural tourism & Sustainable tourism

The entire aim of this project was to explore how tourism and cultural heritage could go hand in hand. There are many examples in the world where management of cultural heritage failed as soon as tourism began. One famous example of such a scenario is the stone statues on Easter Islands. Known all over the world, this site is witnessing

damage caused by tourism. Those who live on the island believe they are facing ecological disaster because of hordes of tourists. But their complaints have fallen on deaf ears and lack support from those on the island who survive on visitor dollars.²⁴ Another example is the city of Petra in Jordan, also a cultural heritage site, which has been damaged by the enormous flow of tourists. Erosion of its natural sandstone rock walls, damage to its delicate plant life, and the need for expensive, ongoing restoration work all form part of the consequences of mass tourism.²⁵ These examples show the sensitive line between cultural heritage sites and its exploitation from tourism. There are many articles, books and websites on this subject. Here a list of the ones which have been of most relevance to this research project.

→ Books

- **Bob Mc. Kercher & Hilary Du Cross, Cultural tourism - *The partnership between tourism and cultural heritage management*, 2002**

This entire book is devoted to cultural tourism; cultural heritage being the main motivation for tourist to visit a site. The book describes the challenges faced when wanting to achieve sustainable cultural tourism. They talk about the positive and negative influences tourism can have on a site and which parties should be involved when sustainable cultural tourism is to be successfully reached.

→ Articles

8. **Icomos International Committee On Cultural Tourism, *Tourism At World Heritage Cultural Sites: The Site Manager's Handbook*, 1999**

Published by the Intl' Council on Monuments and Sites (ICOMOS) and the World Tourism Organisation (WTO) this 2nd edition is devoted to helping the managers of World Heritage Sites accomplish a dual purpose: to conserve the site given to their care and to provide meaningful and considerate access to visitors at the sites. It recommends a plan of action that would help conserve the sites for future generations, while allowing access and appreciation for the present generation.

²⁴ <http://www.guardian.co.uk/environment/2009/sep/06/mass-tourism-environmental-damage> (14th of March 2010)

²⁵ <http://www.friendsofworldheritage.org/issues/preserve-and-protect/uncontrolled-tourism.html> (14th of March 2010)

9. Miloš Drdácky, Tomáš Drdácky, David Creighton – ITAM, *Impact of cultural tourism upon the diversity of built heritage*, February 2007

This article describes the direct and indirect effects tourism can have on cultural heritage. These can range from deposits on surfaces (like dust) or the cause of moist created by a big group of tourists. Although it may seem as if this might not have been of relevance directly to heritage underwater, there were still some examples of possible negative effects that are usually not included in other texts concerning tourist damage.

10. UNESCO, *A Proposed Framework for the Development of Joint Cooperation on Nature Conservation and Sustainable Tourism At World Heritage Natural sites between the tourism industry and the UNESCO*, World Heritage Centre,

This framework has been used as a plan on how to work with cultural heritage sites when wanting to promote collaboration from the tourism industry as well as the local population. This document contains steps on how to proceed and in which order these steps should be taken, this has been taken into consideration during this research project.

11. ICOMOS, *Principles And Guidelines For Managing Tourism At Places Of Cultural And Heritage Significance*, December 2002

This article gives a step-by-step plan on how to attract tourists to a site, how to avoid conflicts between tourist and heritage sites, how to ensure the visitors' experience, how to involve stakeholders in this process and how the local community can benefit from tourism developments. It gives an overview of all the things that should be taken into consideration when dealing with cultural heritage. Although this article is rather short and does not go into too much detail, it has given the researcher a good overview of all the aspects that are involved with cultural tourism.

12. Arthur Pedersen, *Managing Tourism at World Heritage Sites: a Practical Manual for World Heritage Site Managers*, UNESCO 2002

This article describes the impacts tourism can have and the problems they can create when dealing with cultural heritage sites. This article is, like the title

already says, an actual handbook for any heritage site manager. It has the same features as the article mentioned above – the article from ICOMOS – however this article goes more into detail.

13. Commission on Sustainable Development, *Sustainable tourism: A local authority perspective*, International Council on Local Environmental Initiatives 1999

This article gives advice on how to make tourism sustainable. Their focus is to involve the locals and using the resources you have. Especially the part where they describe how it is in everyone's interest to use the resources you have, instead of building new ones, have been of great relevance and importance to this research.

Chapter 3 Research questions

Every research is following the path of a main question supported by sub-questions. These questions show the objective of the research and were used as the guideline of the entire research. In this chapter it will become clear what the researcher has focused on and which subjects have been considered.

3.1 Main question

What are the possibilities of opening up the shipwrecks in situ in the Oostvoornsemeer to the general public, keeping in mind the appropriate preservation and management of the sites?

The main question is the objective of the research. The answer to the main question was the ultimate aim of the research and will hopefully give new insights to parties interested in this specific subject.

With chapter one in mind, it is obvious that the objective of the researcher and of the commissioning client was all about integrating 'the general public' in the domain of cultural heritage. The sites were, and still are, not officially open to the general public, which is why the researcher examined the feasibility of opening up this site to the general public. It can be stated that with the answer to the main question, the problem statement has been made clear and the final desired objective has been reached.

3.2 Sub-questions

1. *What is the quality of the shipwrecks and their direct surrounding?*

This sub-question is important for the entire research as the answer to this question will give a better insight into whether or not the shipwrecks will be interesting enough to be opened up to the general public in the first place. The subjects which have been covered within this sub-question is the quality of the water, the quality of the shipwrecks, how deep they are located, the beauty of the lake itself, the ecstatic, historical and emotional value of the shipwrecks and the infrastructure in general. It is important to establish the unique selling points of the shipwrecks and so this sub-question has done so.

This sub-question has been answered by having done desk research, observations and by having conducted interviews with archaeologists and divers who are concerned with the Oostvoornsemeer and its direct surrounding.

2. Which water-based and shipwreck related activities are possible to carry out at the Oostvoornsemeer?

Sub-question two is concerned with what the actual possibilities are with the shipwrecks. There are numerous examples of what other countries in the world have done with the opening up of shipwrecks to the general public. It is important to see which tourism activities can be carried out at the site and which ones can not. This sub-question has been answered by having done desk research and by having conducted several interviews

3. Who are the stakeholders and what are their wishes and needs?

Every project which is concerned with change asks for a stakeholders' analysis. That is why this sub-question is very important as it will give the commissioning client an overview of who to work with, who could have an added value and which group of people are worth investing in. Once the possibilities at the lake were made clear, it was then possible for the researcher to find out which stakeholders to involve and which ones to leave out.

This sub-question has been answered by having conducted interviews with the stakeholders in the direct vicinity of the lake and the stakeholders 'higher up'; the local authorities. Also a separate survey was conducted in order to measure the level of

interest recreational visitors have towards the shipwrecks found in the Oostvoornse meer.

4. How will the preservation of the shipwrecks be carried out and who will take care of this?

Opening up the shipwrecks to the general public will most likely have a major impact on the quality of the shipwrecks if management fails to follow. It is rather important to have an insight into how management of cultural heritage sites should be carried out in order to avoid the site from deteriorating. The government hopes to decentralise management on cultural heritage sites and so hopes to leave the management of this site to the local authorities. This sub-question was answered by having done desk research about cultural heritage management and having conducted interviews with archaeologists and local authorities.

5. Is the site capable of being financially self-reliant?

Sub-question five is concerned with numbers and figures, because one of the objectives of the commissioning client was to find out what the financial picture would look like when opening up the sites to the general public. The commissioning client was also interested in detecting whether or not the sites could be capable of being a successful tourist's site, without needing the government's financial support.

Chapter 4 Methodology

This chapter portrays which research methods and strategies the researcher has used in order to having been able to answer all the sub-questions. Every research requires a different approach and so it is important to have a detailed description of the methods which have been used and the methods have been adjusted throughout the process of the research. This chapter is divided in four sub headings, of which two will focus on the qualitative and quantitative research methods used. Within these two headings the researcher has covered all the sub-questions and which method they have required. Note: Sub-questions are present in both methods – qualitative and quantitative – as most sub-questions have required both methods.

First it is important to state what qualitative and quantitative research means and why they have both been important for this research:

Qualitative research is all about getting more into the culture of things and people; what people say or do, what they need or desire and what their norms and values are.²⁶ It is about finding the ‘why’ of things, which is often done by carrying out observations as well as interviews. Interviews are highly important, as different opinions are necessary when wanting to get deeper into what people feel and think when confronting them with the subject that is being researched. Different techniques are possible when interviewing: group interviews, individual interviews, phone interviews, face-to-face interviews. Exactly which techniques have been most appropriate during this specific research will be elaborated on later in this chapter.

Quantitative methods are concerned with numbers and figures. It investigates the what, where and when of decision making and is a typical objective answer to certain dilemmas/questions/problems; it is the facts of what people do. Methods of this type of research are conducting questionnaires, surveys and structured observations, which will then lead to the processing, analyzing and reporting of this quantitative data using Excel or SPSS, Statistics.

²⁶ <http://www.qsrinternational.com/what-is-qualitative-research.aspx> (24th of February 2010)

Quantitative and qualitative research are both examples of gathering primary sources or primary literature; new information. Both methods are very useful in order to gain perspective on the subject, as qualitative information provides reasoning while quantitative information gives facts and figures.

It is important to point out that this chapter will focus only on how the primary sources have been gathered. This is done because the secondary literature used for this research is all described in chapter two; critical literature review. The critical literature review, showing secondary literature, is used to portray which existing sources of information have been used. That is why in this chapter the researcher will show how new information has been gathered, resulting into original perspectives gained by the researcher personally.

NOTE: All of the sub-questions described in chapter three have partly been answered by doing desk-research (books, websites etc.).

Before this research project started, the researcher was aware of the fact that there was not a lot of secondary information to be found on the heritage in the Oostvoornsemeer. This meant that the researcher was required to personally visit the place and dig into everything that was happening in and around the Oostvoornsemeer.

In total, 10 interviews have been conducted and a total of 72 people have filled out the questionnaire. The information derived from both methods has been used to answer all of the sub-questions. To exactly point out which interviews have been used for which sub-question is rather difficult, as it all overlaps. The researcher has always made sure to indirectly get answers to all sub-questions from the interviewees.

Now we will continue with pointing out the different methods used for each sub-question.

4.1 Research methods

Sub-question 1: *What is the quality of the shipwrecks and their surrounding?*

Method: Qualitative research

For this sub-question the researcher used the qualitative method of obtaining information, which in this case were interviews and observations. This is because getting an appropriate answer to this sub-question, there was a need to contact people who had actually seen the shipwrecks for themselves and people who knew more about the archaeological and historical background of the shipwrecks. Also looking at the fact that the researcher would not be able to see any of the shipwrecks herself (she does not have a diving certificate) and as the researcher does not have an archaeological background, the information needed would have had to come from experts.

As the general answer to the question: "What is the quality of the sight underwater?" was always the same, the researcher feels that the amount of interviews conducted was sufficient for answering this part of the sub-question. The interviews were all in-depth and all lasted for a minimum of 45 minutes. The interviews were either conducted at that person's work or home. The researcher decided to not record the interviews, but just to use pen and paper and noting it down during the interviews. This worked out well. Again, it is difficult to state which interviews exactly have been used for this sub-question, as all the interviews overlap. So we can state that 10 interviews have been conducted in order to answer this sub-question.

The researcher has also personally visited the Oostvoornse meer three times in order to do observations and to then be able to answer the second part of this sub-question; what the surrounding is like at the Oostvoornse meer. Although this has given the researcher a good perspective on the direct surrounding of the lake, the researcher also feels that these three visits may not have been enough. This is due to the fact that the lake turned out to be a lot bigger and further away than first expected, resulting into the fact that there was still a lot left to see. However, it must also be mentioned that the researcher has gained a lot of information about the direct surrounding of the lake from the interviews and by having checked websites.

Sub-question 2: *Which water-based and shipwreck related activities are possible to carry out at the Oostvoornsemeer?*

Method: Qualitative research

This question partly required desk research, as there was already a lot of information concerning this subject, including examples of in situ shipwrecks turned into tourist attractions from around the world. Besides this, also some in-depth interviews have been conducted with several experts on cultural heritage management, diving and archaeology.

As all interviews were conducted with people who are either experts in archaeology, diving and/or cultural heritage, the researcher asked each and every one of them for suggestions on what to do with the Oostvoornse meer.

Each one of them came with completely different suggestions, which resulted into a pool of possibilities. The interviews helped the researcher a lot when it came to feasible and non-feasible tourism possibilities. The method the researcher used for these interviews turned out to be a kind of snowball effect: After having conducted the first interview and having asked this person for his/her suggestions on what to do with the Oostvoornse meer, it was exactly with these same suggestions that the researcher went to the next interview and proposed those ideas. Some ideas turned out to be too ambitious, some just simply impossible to carry out and some became the centre of the interview. They will all be elaborated on later in this report.

Two interviews in particular were arranged with people who are concerned with making archaeology available to the general public and so whom were contacted specifically for this sub-question. Those two people were: Annemarie Pothaar from the town hall of Almere who is concerned with making archaeology 'likeable' for the general public and Marjolein Woltering from the ADC heritage in Amersfoort who is concerned with the communication side of archaeology. Although Annemarie Pothaar did not even know of the existence of the Oostvoornse meer, she has given the researcher a handful of good suggestions. The suggestions and ideas derived from these two interviews were later on introduced to the people who are directly concerned with the Oostvoornse meer.

Sub-question 3: *Who are the stakeholders and what are their wishes and needs?*

Method: Qualitative and quantitative research

In order to find all local stakeholders involved, the researcher first carried out some desk-research. With this desk-research it soon became clear who the local stakeholders were and so the appropriate people were contacted. Some have been interviewed (qualitative), some have been contacted throughout a survey (quantitative) and some have simply been contacted over the phone.

In the research proposal it was stated that the researcher would carry out a target group analysis. This however has not been done due to the fact that this report will serve its purpose of advising, rather than being a marketing plan. Another reason why this has not been done is because of time-constraints. When the researcher started this project, it was thought to be possible to do an entire marketing report, however, this project turned out to be too big to do so in the given amount of time.

For this specific sub-question, the researcher has encountered quite a few fall-backs. One example was the difficulty of contacting the local authorities. The reason why it was difficult could be because the researcher was not always taken seriously or because of the lack of responsiveness of some of these stakeholders.

Another difficulty was the fact that the wishes, needs and expectations of all stakeholders involved were often completely different from each other and the willingness to work together, rather than competing against each other, was low.

These fall-backs have led to the conclusion that for this specific subject, more time is needed.

Looking at all of the aspects concerning the stakeholders, the researcher felt the need to first advise the commissioning client in what to do, in stead of making a 'ready-to-implement' kind of report.

Here an overview of which methods was used for each stakeholder:

- ➔ Local authorities: By phone & face-to-face interviews
- ➔ Local businesses: Face-to-face interviews
- ➔ General recreational visitors & divers: Short questionnaires (a total of 72)
- ➔ Societies involved in Oostvoornse meer: Interviews

The questionnaire used was short and to the point (see appendices). This was chosen because when the researcher first visited the lake, it became clear that the general recreational visitors and divers did not feel like spending more than five minutes on filling out a questionnaire. Another reason why it was short is because the researcher only needed to find out whether or not people knew about the shipwrecks and whether or not they would be interested in knowing more about the shipwrecks. After all, the questionnaire did not serve its purpose of being a target group oriented tool; it was used to add value to the stakeholders' analysis.

The researcher feels that 72 questionnaires were sufficient to help answer part of this question. The reason why a total of 72 questionnaires have been conducted is simply because during the researcher's visits to the lake there were about 72 people present at the lake. The few more that were there were simply not able to fill it out (people who were kite surfing or diving at the time).

Sub-question 4: How will the preservation of the shipwrecks be carried out and who will take care of this?

Method: Qualitative research

The researcher put a lot of emphasis on the authorities when it came to finding the answer to preservation. However, there have been quite some authorities who have not been involved during this research project, simply because they were not easy to contact. Especially the Port of Rotterdam and the Waterschap were difficult to contact; they were either not interested in providing answers to certain questions the researcher had, or were unable to put the researcher through to the contact person in charge of the Oostvoornse meer. Some of the parties involved in the 'Impuls Oostvoornse meer' project were also not able to meet, so there could be a gap in the information derived from local authorities.

The GZH (recreation authority of the province of Zuid-Holland) and the province of Zuid-Holland have played an important role in answering this question. Although the researcher was hoping to contact more authorities, the GZH and the province of Zuid-Holland have proven to be sufficient. Together with them and countless other interviews, ideas concerning the preservation have been thought of.

The interviews conducted were either face-to-face (with the GZH) or by phone (with the province of Zuid-Holland).

Although not all of the local authorities' opinions are included in the answer to this question, it must be made clear that by means of the few that have been interviewed, including policy makers who are active in other parts of the Netherlands, different perspectives of preservation have been thought of.

Sub-question 5: *Is the site capable of being financially self-reliant?*

Method: Qualitative research

Besides having had to perform desk-research in order to find out more about prices for certain objects and/or changes, there was also the need to conduct interviews with people who could tell the researcher more about what kind of changes to implement in order to generate money. The ideas generated from the interviewees together with more detailed information found on the internet resulted into the answer to this question.

It must be stated that some details, especially concerning prices, were not able to be found. This was due to the fact that for some objects to be created around the Oostvoornse meer, the local authorities were not able to provide the researcher with the related (financial) details as it also depends a lot on time, size etc. Especially the price towards integrating the local authorities into the indirect preservation of the shipwrecks was hard to find. As the thesis is portrayed as being something purely hypothetical, as it is an advisory report after all, the local authorities were not able to provide the researcher with the expected costs. A detailed overview is needed and this can only be created if the commissioning client is willing to invest in this.

4.2 Sampling method

Irrespective of the method the researcher has made use of, sampling methods are classified as either probability or non-probability. In probability samples, each member of the population has a known non-zero probability of being selected.

Probability sampling includes:

- Random sampling
- Systematic sampling
- Stratified sampling

In non-probability sampling, members are selected from the population in some non-random manner.

These include:

- Self- selection
- Convenience sampling; when there is very little difference in target group, one can contact people randomly
- Judgment/ Purposive sampling; for small samples, one selects its own sample
- Quota sampling; mostly for interviews, used for a large population
- Snowball sampling; when there is a sufficient target group, but there are not enough contacts in order to conduct the surveys, then the convenience of having one contact person who might know more people will be used.

In order to make clear which techniques have been used, the researcher has pointed out which manner of working has been used for each sub-question.

- Sub-question 1: *What is the quality of the shipwrecks and their surrounding?*
 - Carried out by having conducted interviews and observations (qualitative method)

The researcher first decided to talk with archaeologists who were directly involved with the Oostvoornse meer. Those two were Frank Stoop from the LWAOW and Fred Groen from Wrakduikstichting 'de Roompot'. The sampling method used for this sub-question was simple: Getting as many archaeologists and divers as possible. The diving world turned out to be quite small, so after a while you keep on hearing the same names from everyone. That is why the researcher feels confident about the validity of the sampling used for this sub-question.

Convenience sampling has been used when divers were questioned during the observation day at the Oostvoornse meer. This was chosen because there was not that much difference in this group; they were all divers aware of the existence of the Oostvoornse meer. Obviously the researcher has tried to talk with different age groups, in order to get the overall opinion from all age groups involved. The researcher asked divers about the quality of the water, what their opinion was on the researchers' project and what they would like to see improving. As there were approximately 60 divers on the day of the observation, it was rather easy to randomly ask divers.

- Sub-question 2: *Which water-based and shipwreck related activities are possible to carry out at the Oostvoornsemeer?*

- Carried out by having conducted interviews (qualitative method)

All of the interviews conducted have been used in order to answer this question, as the researcher always asked for the interviewees' opinion on what to do with the Oostvoornse meer. The researcher has made use of the snowball effect within the non-probability sampling, as interviewees were always asked to get the researcher into contact with other experts. After a few interviews it seemed that the researcher had covered most of the people involved in the Oostvoornse meer, underwater archaeology and diving. As was mentioned earlier, the underwater archaeology world turned out to be quite small, so with the help of the interviewees and surfing the internet, most experts were contacted.

- Sub-question 3: *Who are the stakeholders and what are their wishes and needs?*

- Carried out by having conducted interviews (quantitative method)

For this sub-question there was not really a question of sampling, as there were only a few stakeholders involved in the Oostvoornse meer. Except for the fact that not all the local authorities have been contacted, most of the businesses around the lake have. From those businesses the researcher was put into contact with other people.

As was mentioned before, the sampling method used for getting into contact with the divers at the Oostvoornse meer, was convenience sampling; they all belong to the same category.

Also in the case of the local authorities, they have all been tried to contact. No sampling method was used for this stakeholder, as there weren't that many to begin with. It must be mentioned again that not all of the local authorities have been included in the stakeholders' analysis. This means that there exists the possibility of this sub-question not being complete.

It must be mentioned that the researcher wasn't able to contact one important stakeholder, a diver, who could have informed the researcher about many developments going on at the Oostvoornse meer. The researcher heard from several people that he was actually the one to discover the shipwrecks and he also knows where a lot of them are located. The researcher was told that he has been doing research on the shipwrecks non-stop for the past three years. He could have been an important source of information and someone important to include in the stakeholders' analysis.

- Sub-question 4: *How will the preservation of the shipwrecks be carried out and who will take care of this?*
 - Carried out by having conducted interviews (qualitative method)

The researcher derived the answer to this question by having focused on the local authorities at first. This was also done because one of the recommendations made by the commissioning client was to shift and decentralise the authority on the shipwrecks from the RCE to the local authorities. The sampling method used for this sub-question was mainly based on whichever authority was able and willing to help. As was mentioned before, not all local authorities were willing to collaborate, so the ones which were have been implemented in this sub-question.

- Sub-question 5: *Is the site capable of being financially self-reliant?*
 - Carried out by conducting interviews (qualitative method)

The main source of information for this sub-question was one person in particular. That was because he was able to provide the researcher with information that could otherwise not have been found. The actual sampling method used could be stated as judgement sampling, as this person was 'judged' to be the only one able to provide the researcher with an appropriate answer.

4.3 Validity and risks: A reflection on research methods & population

With every research there are always some risks involved and certain questions of validity. When talking about the methods used for sampling, the researcher had to consider the validity of the chosen population and how representative that population is. A few examples of validity and risks applied to this research:

- Representation of entire population

As a questionnaire was carried out for this project, the researcher had to think about how to effectively represent an entire population. The researcher first thought that a visit to the lake could help. That way, the researcher would be able to see how many people there are, what kind of people there are, what their age group is etc. However, after having visited the lake it turned out that there were not that many people in the first place, so the researcher was able to question everyone. The same goes for the second and third visit. As the researcher only wanted to know whether or not people were aware of the shipwrecks and whether or not they would be interested in knowing more about them, the finding of a representative population became slightly unnecessary. The researcher believes that there could still be a minor risk concerning the choice of the representative population, because 72 filled out questionnaires could be considered as not enough. Preferably, 100-150 questionnaires are sufficient and were also initially the wish of the researcher to reach, however there was no opportunity to carry this out.

- The difficulty with local authorities

Some local authorities were difficult to contact, which could raise the question of validity. The researcher does believe that the few local authorities that have been contacted were able to provide the necessary information, although more would have been preferred.

Especially the authorities involved in the project of 'Impuls Oostvoornse meer' were difficult to contact. They were either unable to find the appropriate person to provide the researcher with information concerning the Oostvoornse meer, or they were uncooperative.

- **Time constraints**

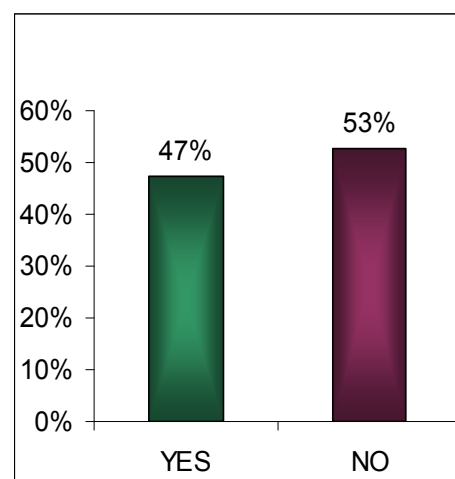
Time was to be distributed according to the effort and complicity of the action. This was rather difficult, as there have been pitfalls and unforeseen happenings. Especially the fact that the interviews took far more time than calculated beforehand, gave the researcher less time to do other things concerning the research, such as analysing etc. Also the making of appointments took more time than expected; by the time the researcher got a response to an email, two weeks had sometimes already passed. The researcher does feel that everything has worked out well, however, if more time were assigned, than more local authorities might have been involved.

Chapter 5 Results: Quality of shipwrecks, lake and surrounding

The Oostvoornse meer certainly has a lot to offer. From wind-surfing to kite-surfing and from hiking to diving; these are all commonly seen activities at the Oostvoornse meer. As the Oostvoornse meer used to be part of the sea where ships would pass through on their way to either the open sea or the harbour of Rotterdam - prior to 1966 when the Maasvlakte 1 was realised - it is not a complete surprise that there are shipwrecks to be found on the bottom of the lake. However, the amount of shipwrecks located at the Oostvoornse meer is exceptional. The only problem is that nobody knows for sure just how many shipwrecks there are exactly. Some say 20, some even say more than 30. Also the names people give to shipwrecks varies from person to person, which makes it difficult to check whether or not people are referring to the same shipwreck.

To establish the quality of the shipwrecks is quite difficult. This has to do with the people's frame of reference in relation to the actual physical appearance of a shipwreck. When someone says: 'The shipwreck is complete', for non-archaeologists this means that it will be likely that the shipwreck itself is recognisable and intact. However, according to Peter Seinen, when an underwater archaeologist says the same, it means that by doing research they can guess the original structure while the actual physical structure of the shipwreck is for the most part destroyed and unrecognisable. This is just to explain that the quality of something is subjective according to your background.

Let's take one step back, because while some of us are wondering how many shipwrecks there are exactly, there are also some who don't know there was even one in the first place. According to the 72 people questioned around the Oostvoornse meer on two different occasions, 47% of the people knew about the shipwrecks, while 53% didn't know of their existence (as can be seen in the graph).



Graph 1: Did you know about the shipwrecks?

5.1 The shipwrecks

As there is not yet an official outline on the exact amounts of shipwrecks to be found at the Oostvoornse meer nor the historical background of these shipwrecks, the following overview portrays only what we do know up to now. It must be mentioned, that besides the shipwrecks in the Oostvoornse meer, there are also countless other objects to be found as you will see below.²⁷

1. **OVM 1 Stoa:** This shipwreck is located right in front of the Stormvogel (the restaurant) and probably sank somewhere between 1739 and 1765. The ship was made almost entirely in oak wood. The back and the top part of the shipwrecks have disappeared
2. **OVM 2 Archimedes:** This shipwreck was an old either wooden or steel steam sailing ship from 1839. It is an old English ship which sank when it was on its way from Rotterdam to Hamburg. Only a few parts of this shipwreck are found as it is thought that the shipwreck was blown to pieces in 1930.
3. **OVM 3:** This shipwreck's location is not entirely known as coordinates are missing. There is little known about the shipwreck, besides that it is not in a good state
4. **OVM 4:** Fragments of a shipwreck which are located in an area of 10 x 5 metres. The fragments are wooden and rather heavy and it does not appear as though they have been burned
5. **OVM 5:** The fragments found on this location are similar to the OVM 4. The report states that further research is needed for these fragments
6. **OVM 6:** This shipwreck has not been entirely researched nor measured yet, however there might be the possibility that this ship was taking over some of the loads of the OVM 8 (see next page) when soon after they both sank

²⁷ Overview derived from: 'Uitgebreide Rapportage Waarnemingen', archive of RCE (8th of June 2010)

7. **OVM 7:** The fragments found on this location are found at a depth of 18-25 metres. Some wooden remains are pointing out of the sand; there is the possibility that more is hidden under the sand
8. **OVM 8:** Located on the south side of the lake, this shipwreck is an old trader ship which sank on its return from the Mediterranean Sea. This ship was probably on its way to Brielle or Rotterdam. The shipwreck was found on a depth of 14-17 metres. This ship is probably from the end of the 17th century
9. **OVM 9 South-side, Flaes:** It is possible that this shipwreck is positioned upside-down. Several objects have been found in and around this shipwreck. The ship is 20 metres long by 3-4 metres wide
10. **OVM 10:** As there are many fragments to be found and on two different locations, it is difficult to establish whether or not the objects are derived from the same ship and same time
11. **OVM 11 Loodbaar:** Some objects from this shipwreck have been excavated and put in an archive, although archaeologists were not able to establish the exact time the fragments are from
12. **OVM 12a (used to be OVM 14):** The remains of this shipwrecks are in quite good state and there seem to be two locations with some of the remains (OVM 12b)
13. **OVM 13 (used to be OVM 15):** The fragments of this shipwreck are spread over an area of about 40 metres. It appears to be a ship from the 18th century. No load or inventory have been found
14. **OVM 14:** This ship seems to be from the 18th century and only 2/3 of the shipwreck is found. It is likely that the back part of the ship has been lost
15. **OVM 15:** This wreck is an old airplane which dates from the WWII. It's an English bomber, type Blenheim IV, which was shot down on 04-07-1940.

Besides the airplane, also munitions and bombs have been found in and around the plane, which have been excavated and deactivated

- 16. OVM 16:** Not a lot of information is known about this shipwreck, besides that one part of the shipwreck is pointing out of the sand and some fragments of wood have been found
- 17. Car:** There is also a car to be found; an old yellow beetle, which was put in the water on purpose. It is not clear who did this and when this was done
- 18. SRV bus:** This bus was also put in the water on purpose; SRV busses (which are not commonly used anymore) are 'driving supermarkets'
- 19. Boats:** There are some boats found in the Oostvoornse meer which are not of historical value; they were purposely sank just a few years ago
- 20. Tunnel:** The tunnel in the Oostvoornse meer is often used by diving clubs to let their divers practise on diving straight (they are not allowed to touch the walls in the tunnel)
- 21. Tires:** This trail of tires functions as a way of giving direction to divers to certain objects within the Oostvoornse meer.

As was mentioned before, it is very likely that more objects (including shipwrecks) are yet to be discovered and researched in the Oostvoornse meer. The RCE has carried out a sonar research of the lake, on which it appears that more shipwrecks are hidden under the sand – Johan Opdebeeck, RCE.

The map we can see on the next page shows where the shipwrecks are located in the lake.

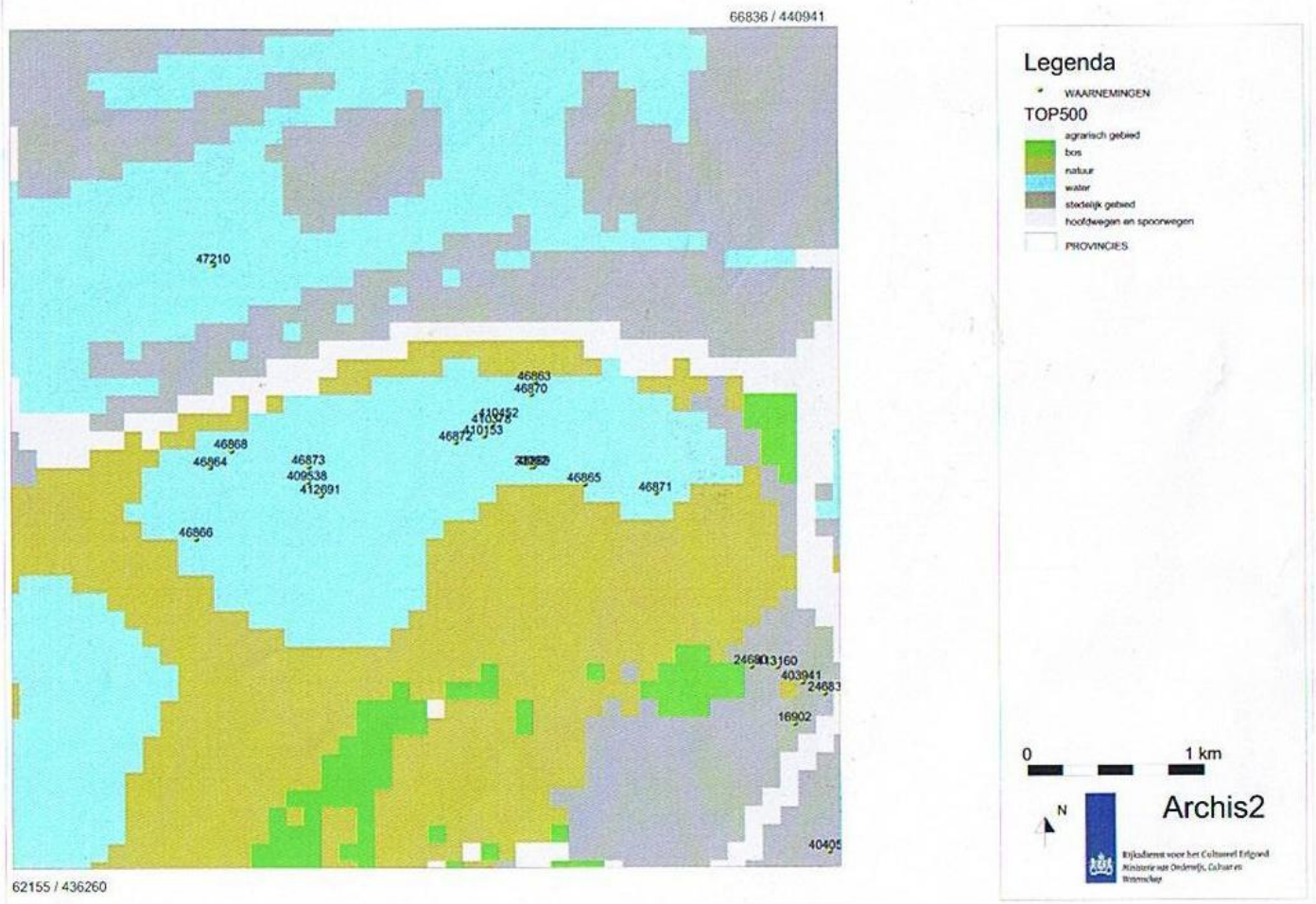


Image 4: Map of Oostvoornse meer, including the shipwrecks (from RCE)

Now that we have covered the shipwrecks and other objects to be found in the Oostvoornse meer, let's also have a look at the lake itself and the surrounding area.

5.2 Oostvoornse meer and its direct surrounding

The opinion on the view underwater varies from diver to diver. Some divers state that from time to time you can see as far as 12 metres, some say up to four metres and there are even some divers who have experienced bumping up against an object underwater as the sight was no more than 10 centimetres. One thing most divers do agree upon is the fact that compared to other lakes, the sight underwater at the Oostvoornse meer is good. It is also mainly for this reason that many diving schools offer courses specifically at the Oostvoornse meer.

There are many divers who mention that the sight has improved over the last few months, due to the constant flow of salt water entering the Oostvoornse meer through a pipe line. This project – Impuls Oostvoornse meer – was initiated to improve the flora and fauna that was deteriorating because the lake was getting less and less salt, but also for the improvement of the sight underwater.²⁸ However, according to Rinus Kenters, the flow of salt water has been temporarily stopped, because the pipe line is already broken.

Another exceptional feature the Oostvoornse meer offers is the depth of the lake. According to Frank Stoop, the Oostvoornse meer is the deepest lake in the Netherlands, resulting into the only spot in the Netherlands where divers can practise deep-diving. The depth of the lake together with the general good view underwater makes this lake attractive to divers.

The direct surrounding of the Oostvoornse meer is a protected nature reserve, where the southern part is a specific bird protection area. The northern part of the lake offers 3 entrances to the lake (which are also the only ones); the Stormvogel, the Baardmannetje and the Bergeend. The entrance at the Stormvogel is mainly used by divers, the Baardmannetje by kite-surfers and windsurfers and the Bergeend by fishermen and some divers.

5.3 Sub-conclusion

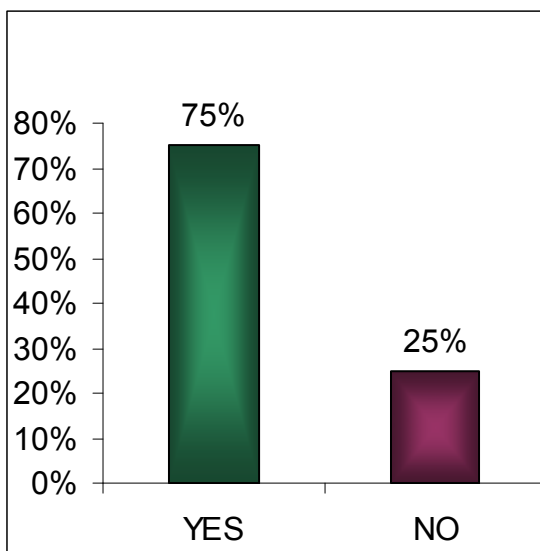
There are many objects of historical importance to be found in the Oostvoornse meer. Although some research has been carried out at the lake, there are still many things yet to be discovered and researched. We can conclude that the combination of having a fairly good view underwater together with the countless shipwrecks and other objects located in the lake, the overall quality is good and attractive to divers.

²⁸ <http://www.natuurlijkooostvoornsemeer.nl/> (3rd of June 2010)

Chapter 6 Results: Possible developments at Oostvoornse meer

This chapter has two main headings: Activity related ideas at Oostvoornse meer & Information related ideas at Oostvoornse meer. After having conducted all the interviews and having done several observations, the researcher concluded that activities related to the shipwrecks as well as information regarding the shipwrecks, were both not developed. That is why the researcher has decided to regard both as separate elements. The activity based ideas are more related to the water, while the information based ideas are for things happening on-land.

For this chapter to be water tight, it is important to mention that a questionnaire has also been used. Not a questionnaire where people give their recommendation, but a questionnaire to see if people are aware of the shipwrecks (as was mentioned before, only 46% of the people knew there were shipwrecks in the first place) and whether or not they would be interested in knowing more about the shipwreck. And although the



questionnaire was not filled in by many (72 people in total), the general answer to whether or not people are interested in knowing more about the shipwrecks was clear: YES. In total, 75% of the people were interested in knowing more about the shipwrecks. With this in mind we will continue with the activity related ideas for development at the Oostvoornse meer.

Graph 2: Interested in knowing more about shipwrecks?

6.1 Activity related ideas at Oostvoornse meer

As some of the shipwrecks are located as deep as 20 metres and sometimes more, the access to them are limited to only a few experienced divers. This can not be changed, and so the researcher had to find other ways of making these shipwrecks available to the general public. At first, ambitious, and at the same time quite impossible, ideas were created

Although some of the ideas haven't made it to the finish-line, the researcher still found it important to mention and elaborate on these ideas. Why? Because this shows that all (theoretically) possible ideas have been considered and so nothing has been excluded beforehand without having had a look at it first. The following three sub-headings will cover the ideas mentioned above. After that we will continue with the more plausible ideas.

6.1.1 Underwater tunnel (for non-divers)

The underwater tunnel idea was derived from countless examples of underwater tunnels at aquariums in other parts of the world. If they can do it in an aquarium, why couldn't we at the Oostvoornse meer? We certainly could theoretically, however such a tunnel does have three major negative points.

1. It would cost a lot of money. This by itself wouldn't be a problem if you knew you could earn it back from the visitors. However, in order to know this, you would need to conduct an entire separate marketing plan just for this, which was not the aim for this research project.
2. It could do harm to the nature. Such big construction projects often disturb the animals and the environment and looking at the fact that almost the entire lake is a protected nature reserve, it would almost be impossible not to disturb the flora and fauna. Also the fact that such a project would have to lead to a massive flow of tourists (if you want to obtain a return of investments), this mass-tourism could also have a negative effect on the natural environment.
3. Last but not least, this report was written with the idea of creating something sustainable. As one big part of sustainability is using the resources you have, this idea wouldn't at all be sustainable.²⁹

Conclusion: Not possible

²⁹ Article 15, sustainable tourism (2nd of June 2010)

6.1.2 Boat with see-through bottom (for non-divers)

Let's consider the second idea: the boat with the see-through bottom. Although this idea might seem far more feasible than the one described above, this idea is unfortunately also not possible to implement. There are two reasons for this:

1. Although the quality of the water is reasonably good, as is mentioned in chapter 5.2, the view from the top down is pretty much non-existent. According to the observations done on 29th of May 2010, the maximum you can see from the surface down is 10 centimetres. As the shipwrecks are located on a minimum of 7 metres, having a see-through bottom on a boat wouldn't make any difference
2. It is not allowed to have motorised boats on the Oostvoornse meer.³⁰ Although certain exceptions are made, for example when the LWAOW has their practical exam of the NAS (Nautical Archaeology Society)³¹ and a boat is needed to take the divers to the shipwrecks, you can not go on the lake with a motorised boat.

Conclusion: Not possible.

6.1.3 Submarine tours (for non-divers)

Fred Groen, initiator of shipwreck association 'De Roompot', had quite an extraordinary idea; doing submarine tours in the Oostvoornse meer. This idea does provide the answer to the sight problem, as you can get very close to the wreck with a submarine and it also exists already in other parts of the world which could provide the proof of success. However, the difference with other countries, is the fact that elsewhere the submarine tours are in clear blue seas where a lot of maritime animals can be seen as well.³² At the Oostvoornse meer on the other side, the sight underwater is fairly good, but it's far from comparison to the Caribbean, including the animals living in the water. It must be stated that this is also a matter of opinion and it could well be that there is such a demand, however these figures are not known.

The second problem with these submarine tours, is that it would cost a lot of money, because besides the acquisition of a submarine, you would also need someone who is

³⁰ Article 7, Provinciaal blad van Zuid-Holland (2nd of June 2010)

³¹ http://www.nauticalarchaeologysociety.org/projects/diving_into_history.php (2nd of June 2010)

³² <http://www.atlantisadventures.com/> (2nd of June 2010)

able to drive it and maintain it. And again, you would also need to know if there is any demand for this in order to make sure you will earn back the investments made.

Conclusion: Not entirely impossible (willingness to invest)

6.1.4 GPS tours on electric boats (for non-divers)

Having considered implementing motorised boats with see-through bottoms at the Oostvoornse meer and then having discovered motorised boats were allowed, a new idea arose: Electrical boats. Annemarie Pothaar from the town hall of Almere came up with the following idea: Tourists would be able to rent electrical boats along with a GPS system and they could do a kind of treasure hunt. They would get the coordinates of some of the shipwrecks and would have to track the shipwrecks by using the GPS system. Once the shipwreck is found as they sail over it, they receive information about it through their GPS system or they get the information simply through a folder which they took along. Even though they would not be able to actually see the shipwrecks, as the water is not clear enough like mentioned before, they can at least feel the thrill of discovering something and imagine what the shipwrecks could look like. With these treasure hunt trips, also non-divers will be able to enjoy the shipwrecks. Annemarie Pothaar mentioned that she expects fathers with their sons to be interested in this concept. This idea could also work because that way motorised boats would be out of the question.

Obviously, as we have seen before, an idea also brings along some negative points to consider. First of all, when the researcher proposed this same idea to the owner of the diving club located at the Oostvoornse meer (diving centre Capelle), he said: "Giving out coordinates will also attract a lot of bad-intention divers." He mentioned, together with countless other people involved with the Oostvoornse meer (see transcript of interviews at appendices), that there are many 'bad' divers at the Oostvoornse meer who either steal things from the boat, or – even worse – who just randomly tear boats apart just for the fun of it. He believes that giving out the coordinates – although it is supposedly only meant for tourists – is just "asking for trouble!" He thinks that these divers will sign up for these trips just to get the coordinates. The researcher's counter argument was that by obliging the people to give back the coordinates after the trip, this could solve the problem as the tracking of shipwrecks without having the

coordinates is practically impossible at the Oostvoornse meer. This is also confirmed by Frank Stoop who mentioned that even he, being the expert of the shipwrecks in the Oostvoornse meer, can't always find them while he is the one in possession of some of the coordinates.

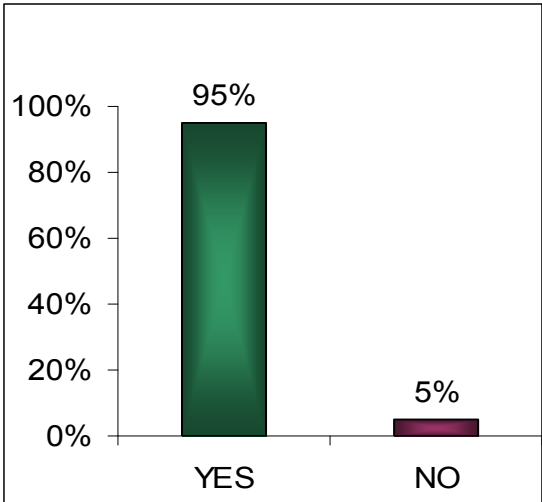
The second problem with this idea is still the fact that there are boats involved. Although electrical, according to Robert Paling from the GZH (Executor Company of regulations for recreational areas, including the area of the Oostvoornse meer) it will still be likely that the town hall of Voorne-Putten-Rozenburg will not allow electrical boats either. The reason why this town hall and province of Zuid-Holland don't want boats on the lake is because it disturbs the wild-life.

Conclusion: Might be possible (if permit is given for electrical boats)

From the above mentioned ideas, we can conclude that water related activities for non-divers will be difficult to realise. This means that for the non-divers there will only be information based possibilities which will be happening on-land. This will be elaborated in chapter 6.2. The following ideas are only for the divers among us.

6.1.5 New perspective on management: Controlled visits (for divers only)

Now that we have covered all the possibilities for the non-divers, let's consider one idea for the divers. As was mentioned before, there are a few divers at the



Oostvoornse meer who have bad intentions. However, it is considered to be unfair for those who are honestly interested in the shipwrecks to punish them for what some divers are doing. According to the results of the survey, 95% of the divers were interested in knowing more about the shipwrecks.

Graph 3: Divers; Are you interested in knowing more about the shipwrecks?

From this we can conclude that something must be created for the divers. Now the question, how do we let divers enjoy the shipwrecks without causing too much damage to them?

The answer is quite easy: **Controlled visits**

First of all, the RCE (state service of cultural heritage) should open up at least one part of the lake (preferable the part at the entrance of the Stormvogel, also because here it is less deep) to the general public where everyone can dive. It should be made clear that it will be important to first make sure that all the shipwrecks' history in this part of the lake is recorded before officially being opened up. This is for the sake of the divers (as they should get informed about which shipwrecks can be found and what their importance is) and for the sake of the RCE (as it will be advisable to get as much historical data before the shipwrecks might eventually disintegrate due to divers or natural influences). This will be elaborated on later in this chapter.

Divers who want to go shipwreck diving for the real interesting shipwrecks (and more vulnerable ones) which are located at the deeper part of the lake, will first have to go to the diving centre Capelle in order to sign up for a NAS course. The diving school will provide them with the opportunity to get their NAS certificate, which means that they will have to do one theoretical weekend and one practical weekend on shipwreck diving. In order to do a NAS course, the divers will have to become a member of the LWAOW, as "they are the only society allowed to give such a course" – Frank Stoop, LWAOW District manager of Zuid-Holland. The only reason why people will have to sign up for the NAS course exclusively at the diving centre, is because this way it will all be centralised in one place, which also makes it easier for the divers to know where to go to.

If they pass this course, they will get their NAS certificate. It is important for the diver to first get their NAS certificate, as it will allow them to know more about the shipwrecks, their value and how to work with them. With their NAS certificate, a permit from the diving school (which will indirectly be from the town hall of Voorne-Putten-Rozenburg) and coordinates of some of the shipwrecks located in the other part of the Oostvoornse meer will be given to them. From then on they will be officially allowed to

go shipwreck diving by themselves. The diver can choose to get a long-term permit, in case he/she is a regular diver, which is valid for a year. With this permit system, the town hall, government or any other official party, is able to check who is diving as people's names are registered.

For those who do not have or do not want to get their NAS certificate, they will still be able to go shipwreck diving to the interesting shipwrecks, although only by means of an organised trip with the Divingcentre Capelle. Rinus Kenters, owner of the diving centre, mentioned that he is in the middle of initiating these kinds of trips. The idea is that a group of max. 4 people accompanied by a guide will leave from the shore with a little underwater scooter. They won't go to the surface until they are back, because that way they will not be able to see where they went and so consequently they will not be able to find the shipwreck again later.

Image 5: Divers at the Oostvoornse meer (taken by: Josh Wagner).



The reason why it's important for a diver to first get their NAS certificate is because it will hopefully make the diver aware of the importance and value of the shipwreck.

As information regarding shipwrecks is not available to the divers, or to the public in general, divers also simply don't know how valuable it is, hence the lack of respect. Frank Stoop: "Information creates respect!" This phenomenon of giving out information and what we could do with that will be elaborated on in chapter 6.2.

The last possible scenario will be someone who is already in the possession of a NAS certificate and who comes to the Oostvoornse meer just for one or two days to go

shipwreck diving. These people will be able to get a one or two day permit with which they can go diving and will cost slightly less than a long-term permit. It is important to mention that both permits (long and short term) should be a lot cheaper than the shipwreck diving trips for people without a NAS certificate, promoting them to get a NAS certificate.

The GZH (Groenservice Zuid-Holland) should also be involved in the process of these controlled visits, because they could be the ones checking the divers and interfering in case something happens. As the GZH is concerned with whether or not people are violating any rules – specifically rules concerning recreation and nature – the GZH will also be able to help to make sure everyone is following the rules. One example, if someone is suspecting another diver of breaking/stealing things, the GZH will be called as they can handle cases like that; i.e. giving fines, arresting people etc. According to Robert Paling, head of Control and Regulation of the province of Zuid-Holland, the problem why the GZH hasn't been interfering with anything concerning shipwrecks so far, is because it is simply not in their jurisdiction. This should be changed.

In this idea of controlled visits, it should also be mentioned that social control will be important. As the GZH will play a bigger role at the Oostvoornse meer, there will also be the possibility for divers to get checked and fined if they are shipwreck diving without that official permit. If a diver with a permit takes someone who doesn't have a permit to go shipwreck diving and they get caught, then they will both get a fine and that person will lose his/her permit. With this knowledge, divers will be less likely to influence each other in bad behaviour and will support each other in getting a permit.

As a kind of counter towards these new and strict rules, the divers should get rewarded as means of getting invitations to certain shipwreck related activities and they should get involved in the developments that are happening at the Oostvoornse meer. "That way they will feel appreciated and responsible for the care towards the shipwrecks and so they will most likely cause no harm"- Annemarie Pothaar, town hall of Almere.

Throughout the rest of report, this activity will be used as a scenario in order to better grasp the outline of this possibility.

6.1.6 Oostvoornse meer as a shipwreck depot (for divers only)

As controlled visits should be implemented in order to protect the real valuable ships located in the deeper part of the Oostvoornse meer, the part right in front of the Stormvogel should be made available for everyone. As was mentioned before, divers should get informed about all the objects they can find and where they are to be found exactly by means of giving out maps or by placing signposts. In order to make this part of the lake more of an experience for divers, the Oostvoornse meer could be used as a depot for other shipwrecks. Meaning that when other shipwrecks found anywhere else in the Netherlands and that have been completely researched, they can be placed in the Oostvoornse meer. According to Fred Groen, the quality of the water in the Oostvoornse meer is good for shipwrecks to survive and as there is no current, the shipwrecks are more likely to be kept in a good state.

According to Johan Opdebeeck, it sometimes happens that shipwrecks who have been fully researched, but which can't be kept somewhere safe, are being destroyed as there is no money made available for conservation.

In order for this to be avoided, placing them in the Oostvoornse meer could be a perfect solution.

If the Oostvoornse meer is to be used as a shipwreck depot in the future, the lake could become an underwater park. This is also in accordance with Johan Opdebeeck who mentions that if this is to be realised, it would make this lake "exceptional and could become internationally attractive." The underwater park could become more of an experience if signposts are to be placed underwater in order to give direction and/or signposts placed at every shipwreck or object with information on its (historical) background.

Now that has been made clear, let's continue with the information related possibilities there are at the Oostvoornse meer.

6.2 Information related idea at Oostvoornse meer

As was mentioned earlier, there is no information available about the shipwrecks to the general public. The lack of information can lead to a lack of respect – Annemarie Pothaar, town hall of Almere. This has also been confirmed by several others (see transcript of interviews at appendices). According to Frank Stoop it should be made clear to the divers that there is nothing left to take at the shipwrecks. This can be done by means of informing people about this and by having an exhibition on all the objects which were found in the lake. This automatically brings us to the first idea of possible information related developments.

6.2.1 Visitor centre

As has been seen from the results of the questionnaire, the local recreational visitors at the Oostvoornse meer would like to know more about the shipwrecks. Here, we are not only talking about divers anymore, but also about any other visitor at the Oostvoornse meer. Information should be made available and this could be done by means of putting up a visitors' centre. Visitor centres are used all over the as a provider of information.

Looking at the fact that the Oostvoornse meer has historical significance, the following applies: *A building or site with historical significance, especially one marked for preservation by a municipal or national government.*³³ This statement is concerned with landmarks and so the Oostvoornse meer should be considered as one. Many landmarks in the world have a visitors' centre in order to portray the importance of a site and this could also be done at the Oostvoornse meer.

The visitor centre at the Oostvoornse meer could be a place where people can see pictures of the shipwrecks, where they get informed about the historical significance of the shipwrecks, and maybe more importantly, where people can view a display with all the objects found in the Oostvoornse meer. The visitors' centre could also function as a place where meetings are held concerning the Oostvoornse meer, where new findings are presented and where events concerning shipwrecks are organised, such as the Schervendag (shard-day) organised by the LWAOW in close collaboration with the ADC heritage. The so-called Schervendag is a day where amateur archaeologists

³³ <http://www.answers.com/topic/landmark> (3rd of June 2010)

The signposts along the walking paths - one example of this is found on the previous page - could portray where about the shipwrecks are located in the lake, their name and their historical background. That way people can grasp the importance of the lake.

6.2.3 Scale model of one of the shipwrecks

Besides the signposts described above which can be used in order for people to grasp the importance of the lake, there is also the possibility of placing a scale model of one or more shipwrecks that can be found in the Oostvoornse meer. That way, there is also the possibility for the non-divers to imagine what the shipwrecks look like.

Another benefit of placing a scale model of a shipwreck according to Fred Groen, is the fact that it can serve as a proof of which state the shipwreck was in at the time of measuring. With a scale-model of a shipwreck, people can then check whether or not the ship is deteriorating and if any damage is being done.

6.3 Sub-conclusion

One unfortunate development is a fact at the Oostvoornse meer; there are some divers who cause (intentional) damage to the shipwrecks. The idea of regulating divers when it comes to shipwreck diving does not mean that no harm will ever be done. According to Fred Groen, Annemarie Pothaar, Frank Stoop and anyone else interviewed for that matter, divers with bad intentions will always be there. As the lake itself is immense, a diver with bad-intentions will always find a way to get to the shipwrecks, with or without the necessary permit. It can be diminished by means of the ideas described in this chapter. One important piece of advice everyone has given the researcher is the fact that giving out information about the shipwreck, educating people on the importance of the shipwrecks and involving divers in the process of decision-making, is the key to success. The final conclusion for this chapter is the fact that the shipwrecks should be opened up to the general public by means of regulation and consistent management.

Chapter 7 Results: Stakeholders involved

Every research project requires the consideration of the different parties involved; the stakeholders. In this chapter we will portray which stakeholders were and could be involved with the developments at the Oostvoornse meer. For every stakeholder the researcher has described which interest they have in the project and what their wishes are.

7.1 Local businesses

The interest the local businesses have in the development project at the Oostvoornse meer is quite simple: more revenue. If the Oostvoornse meer will be developed in such a way as to attract more visitors and maybe more importantly, more divers, it will be likely that those visitors will spend some of their money on the service related businesses that are located at the Oostvoornse meer. There are two restaurants, of which one is used more for special occasions and the other one on a daily basis, one kite-surfing shop and one diving centre. Those four businesses are all located at the entrance of the Stormvogel. As mentioned before, their interest in the Oostvoornse meer project is the same, however there is one specific business which should be considered in more detail: the Divingcentre Capelle.

Besides the wish to get more revenue, the diving centre is also interested in making sure the Oostvoornse meer keeps its unique selling point; the shipwrecks. It is in their interest to conserve the shipwrecks and to avoid attracting the wrong kind of diver (the diver that intentionally causes damage to the shipwrecks). As Rinus Kenters said: "The damage to the shipwrecks caused by divers, causes an indirect damage to my diving school." This is due to the fact that Rinus Kenters has been working on the development of organising shipwreck diving trips. If the shipwrecks are damaged in such a way that the beauty of it is gone, the shipwreck diving trips will also lose its potential of being something special. As he believes that the shipwrecks are of great value to the lake as well as to the general cultural heritage of the Netherlands, he is open towards collaboration in order to conserve the shipwrecks, although it must be mentioned that a great money investment will not be possible for him.

Mr. Kenters is also certainly interested in the development of the shipwreck diving tours. Although the researcher has proposed to integrate a system where divers will first have to follow a NAS course when they want to go shipwreck diving in the deeper part of the Oostvoornse meer – the NAS course is not possible for Mr. Kenters to give and make money on, as only the LWAOW (and indirectly the RCE) is allowed to do that – it is still advisable that the divers will have to sign up for this at his diving centre. That way there is a central point where everyone can go to and everything is registered in one place. In order to make sure that Rinus Kenters does not feel as though the RCE is taking business away from him with the NAS certificate idea, it is advisable to let Rinus Kenters keep the money he gets when people buy their permits. Again, the money people will have to pay for their long- or short-term permits should be cheaper than the shipwreck diving trips he organises.

Also the fact that the lake can be used as a shipwrecks depot, and so could become an underwater park, could hopefully lead to attracting more people even from outside of the Netherlands. Again, this would mean more revenue for all businesses located around the Oostvoornse meer, hence their interest in this development.

Although Mr. Kenters mentioned that it will not be a good idea to open up the entire lake to all divers, he does agree that by giving out general information about the shipwrecks the divers will be more likely to get a sense of respect towards the shipwrecks. That is also why Mr. Kenters is not opposed to the idea of placing information boards and/or pictures of shipwrecks in his shop.

7.2 General recreational visitors

In this section we will discuss the regular recreational visitors as well as the one-time visitors. The regular recreational visitors are considered to be the people that are aware of the lake in means of its location and who visit the lake more than one time a year. The one-time visitors are the people that stumble upon the lake by accident or people who purposely visit the lake for a holiday occasion.

The regular recreational visitors are mainly kite-surfers, wind surfers, hikers, bikers and divers (this last group will be elaborated on in the next section). Their interest in

the lake is that everyone should be able to enjoy their recreational activity without having to interfere with each other too much. Meaning, having divers, kite-surfers and wind surfers all in one place, could have an influence on the safety of the people. This is also in accordance with Robert Paling who mentions that it should be made clear where people can do what. One solution of this is already in progress as the province of Zuid-Holland is planning in developing new signposts with directions and guidelines.

The recreational visitors who often visit the lake don't know a lot about the shipwrecks. According to the survey conducted at the Oostvoornse meer, their interest in the developments at the lake is to find out more about what can be found in the Oostvoornse meer. Although they might not be divers, these regular recreational visitors do show that they would still like to know more about the shipwrecks. And who knows, maybe if they know they can do a diving tour to see some shipwrecks, they would be interested in joining one.

Then let's consider the one-time visitors. Although some of them stumbled upon the lake by accident, these people still showed interest in knowing more about the shipwrecks. A common respond heard from the people that visited the lake by accident was: "It's a shame they don't say anything about the shipwrecks, we would've liked to know more about that." Having signposts around the lake showing where about the shipwrecks are located and what their historical value is, could make the one-time visitors have a more meaningful experience and so that could also lead to them spreading the word to their friends; word of mouth marketing³⁵.

In general, it is actually people's right to understand and appreciate cultural heritage ('Internationaal handvest voor Cultuurtoerisme', ICOMOS 1999).

7.3 Diving community

This section will be divided into two groups: The divers themselves and the diving associations involved in the Oostvoornse meer. This has been chosen because the

³⁵ <http://www.businessdictionary.com/definition/word-of-mouth-marketing.html> (5th of June 2010)

researcher concluded that the interests both groups have are slightly different and so should be treated as such.

7.3.1 The divers

There are advantages and disadvantages for the divers in case the Oostvoornse meer will be developed as is advised in this report. First of all, it is important to say that the general advantage for any diver is the fact that the lake will at least be opened up more than it is at the moment. The advantages and disadvantages described in this section are described with the scenario of the divers having to get a NAS certificate before to go shipwreck diving in the deeper part of the lake in mind. It must be mentioned that if signposts are to be placed at the Oostvoornse meer with background information on the shipwrecks, this has an indirect advantage for the divers: They can learn more about the shipwrecks and its historical value.



Image 7: Divers at the Oostvoornse meer (taken by Josh Wagner)

The idea of divers having to get a NAS certificate obviously has a direct influence on them, which is why this scenario was used for this section.

Let's start with the disadvantages:

- If the idea of obtaining a NAS certificate before being allowed to go shipwreck diving is indeed going to be implemented, the rules and regulations will be stricter and so the openness the lake has now – as everyone is able to go anywhere in the lake, without getting into trouble – will be diminished
- A NAS certificate costs money as well as the permit they will then need to get, whereas now everyone can go diving for free
- If a diver first needs to get a NAS certificate and with that certificate needs to get a permit, the hassle to go diving will be bigger than it is now and so it will be time-consuming

Now that we have considered the disadvantages, let's give the counter arguments towards these disadvantages:

- **Stricter:** The reason why these rules and regulations at the Oostvoornse meer need to become stricter is because otherwise too many people will be able to go to the shipwrecks and so too much damage could be done to the shipwrecks. Uncontrolled visits and just bluntly opening up shipwrecks to the general public can have a major negative impact on the quality of the shipwrecks. The aim of controlled visits is to eventually keep the shipwrecks from deteriorating and so will lead to the possibility of enjoying the shipwrecks for a longer period of time.
- **The costs:** Derived from the interviews, most of the people agree on the fact that when people are sincerely interested in the shipwrecks, then they will be willing to pay for it. Another benefit which could indirectly lead to an improvement is that by making people pay for the site it could hopefully lead to attracting only the 'good' divers. Also part of the money that people have to pay for their NAS course, will go to a fund which will be used for the preservation of the shipwrecks.
- **Hassle:** There is no real counter argument to this disadvantage, besides the fact that it is thought that divers with bad intentions are less likely to go through that much hassle, and divers who respect the shipwrecks are more likely to respect the need of such restrictions.

The real advantage for the diver will eventually be the enjoyment which can last longer when such rules are followed consistently, as the preservation of the quality of the shipwrecks are maintained. The special group of divers in possession of the NAS certificate will also be involved in other developments which are happening in and around the Oostvoornse meer and as soon as new coordinates of shipwrecks are known (because extensive research has been done and everything has been recorded), the divers with the NAS certificate will be the first to get them.

Also because a NAS course is in fact a major contribution to the research of a shipwreck, it could lead to a better understanding of the shipwrecks by the divers. By letting the divers participate in the research of shipwrecks, they will also feel more involved, valued and responsible for the conservation of the shipwrecks. This also goes in line with the statement of Annemarie Pothaar and many other interviewees: “Involve the divers and make them feel important and part of the Oostvoornse meer ‘family’; keep them as your friend as they are the ones who are able to actually physically visit (and so also theoretically able to damage) the shipwrecks.”

Then last but not least, it is obvious that if the part in front of the Stormvogel is to be completely opened up to all divers, this certainly is in the interest of any diver. As many divers mentioned that they would like to know more about the shipwrecks and they would certainly like to know where they are located, it will be a major improvement for them.

7.3.2 Diving associations

According to Fred Groen from the association De Roompot and Frank Stoop from the LWAOW, there is one problem when it comes to working together with the government; they are not given any subsidies, while they do provide valuable work for them. These kinds of associations are of major importance to the government, as they are in possession of the right material and people to do underwater research, while the government doesn't have its own diving team anymore – according to Frank Stoop.

If the government wants to make sure that proper preservation and research is done on the shipwrecks in the Oostvoornse meer, then they will have to consider giving them subsidies. Another possibility would be to consider donating a certain percentage of the income of the NAS courses to a fund where people like Fred Groen and Frank Stoop can make use of. This all is to make sure that the diving associations, which are an important stakeholder at the Oostvoornse meer, are taken seriously in their work and that their interests are also taken into account.

Frank Stoop has especially done a lot of research at the Oostvoornse meer and if such research is to be continued, certain resources are needed. This is not just in favour of Frank Stoop, but also in the general experience of the Oostvoornse meer. As was mentioned earlier, it will be vital to the existence of the shipwrecks that their historical background and value is revealed including their best possible preservation method. Once revealed, it will then be possible to decide which shipwrecks should be included in the area where divers are allowed to go. Besides this, it is also in the interest of people and their right to know more about the cultural heritage found in the Oostvoornse meer.

7.4 RCE

The interest of the RCE in this project is to make sure the underwater cultural heritage is preserved and that the eventual interference of the government at the Oostvoornse meer is limited as much as possible. Their objective from the start was to try and find a way on how to make the Oostvoornse meer (financially) self-sufficient.

The benefit for the RCE when implementing the NAS certificate for people who want to go shipwreck diving in the deeper part of the lake, is that 'free' research is carried out as the entire idea of a NAS course is to do research on a shipwreck. Jan Venema (chairman of LWAOW) mentioned that a NAS course consists of one theoretical weekend and one practical weekend. The practical weekend is always taking place at the Oostvoornse meer.



Image 8: Group of divers going for their practical part of the NAS course (taken by Josh Wagner)

The idea is that divers in a group of about four people will get one shipwreck assigned on which they have to carry out some research. They will do two dives where they will have to perform their given assignments. Once the research is completed, the divers will have to make a report. This report will then go to Martijn Manders from the RCE in order for him to assess.

To conclude this section, the RCE can certainly gain from having more NAS certified divers, as with every NAS exam the RCE automatically gets new information.

7.5 Local authorities

There are quite some local authorities involved in and around the Oostvoornse meer. There are actually so many, that it is not entirely clear who is responsible for what. The general interest the local authorities could have on the developments of the

Oostvoornse meer is the fact that recreation is to be improved when proper management is also to be implemented. As there are many local authorities involved in the improvement of recreation, their direct benefit could be the fact that if management is to be carried out sufficiently, that will be one less worry on their mind. It must also be mentioned that exactly those local authorities concerned with recreation and nature can also view it as a possible threat to nature, as improvement of the Oostvoornse meer (especially if the underwater park is to be realised) could attract more people and could then also have a negative impact on the nature, hence their concern on how to avoid this from happening.

7.6 Sub-conclusion

There are many stakeholders involved in the Oostvoornse meer and they all have different interests in the development of the lake. One might think that strict management is good for the preservation of the shipwrecks, however some might also find this difficult to deal with. One thing always counts when dealing with many stakeholders; they must all sacrifice as well as benefit, as there is hardly the possibility to please all.

If developments are to be implemented in the Oostvoornse meer, it will be wise to involve all stakeholders in order to avoid making certain people feel left out. It is important to have all stakeholders behind you and up to date on what is going to happen. Again, you can't please all, but you can at least inform all.

Chapter 8 Results: Preservation of shipwrecks at Oostvoornse meer

The Malta convention, which is also adopted in the Netherlands as the Law of the Monuments (Monumentenwet), strives for keeping underwater cultural heritage in situ. Meaning that when an object with historical cultural importance is found underwater, the preferred method is to keep it in its original position, rather than excavating it.³⁶ This was also the aim with the shipwrecks at the Oostvoornse meer, which is why all of the possibilities mentioned in chapter 6 are based on this same idea of keeping the shipwrecks in situ.

For this chapter we will also use the scenario of divers getting their NAS certificate.

8.1 The problem

The first degradation the shipwrecks at the Oostvoornse meer experienced dates as far back as the beginning of the realisation of Maasvlakte 1. The Maasvlakte 1 project was initiated to expand the harbour of Rotterdam by reclaiming land from the water through dykes and sand suppletion.³⁷ The sand needed in order to realise the Maasvlakte 1 was also partly taken from the Oostvoornse meer, which resulted into the lake getting a depth of 40 metres while it used to be 18 metres – Frank Stoop LWAOW. This change in depth also had a major impact on the shipwrecks, as all of a sudden the sand which had protected them for so many years was gone. Increased oxygen brought within the possibility for bacteria and fungus to grow and made the shipwrecks vulnerable.

Biological research in combination with the finding of possible shipwreck protection techniques (such as placing nets over the shipwrecks, as was done with a 17th century shipwreck in Sri Lanka³⁸) should logically be the next step. For this to be realised, investment is needed as the protection and conservation of underwater cultural

³⁶ <http://www.erfgoednederland.nl/aandachtsgebieden/archeologie/dossiers/verdrag-van-malta> (5th of June 2010)

³⁷ <http://nl.wikipedia.org/wiki/Maasvlakte> (7th of June 2010)

³⁸ <http://www.ias.ac.in/cuirrci/may102004/1251.pdf> (7th of June 2010)

heritage is expensive, however necessary in order to keep history alive, also for our future generation.³⁹ This has automatically lead us to the first problem: Money
There are some associations that are carrying out archaeological research for the government, however they do not get rewarded by means of subsidies. According to Fred Groen, the equipment necessary to perform underwater research is expensive, and so it is not a surprise that these associations are limited in their research. As was mentioned earlier, the RCE doesn't have its own diving team anymore, so they fully rely on the help of these associations.

The second problem with the Oostvoornse meer is the lack of authority and so the lack of an indirect method of shipwreck conservation: Control. When archaeological objects are found underwater in the Netherlands and which are older than 50 years, they are considered cultural heritage and so they automatically fall under the protection of the Dutch law of monument protection.⁴⁰ This law also states that people are not allowed to touch the objects nor move the objects to a different location. If they do, they will get a penalty.

Although this law exists, according to Fred Groen and most other interviewees (see appendices), the procedure of giving out penalties and fines in cases where people purposely cause damage to shipwrecks, is almost non-existent. This also applies to the Oostvoornse meer. As was mentioned in an earlier chapter, the GZH, who is in charge of carrying out the rules and regulations concerning nature and recreation stated by the province of Zuid-Holland, is not necessarily assigned to fine divers at the Oostvoornse meer for bad behaviour.

There are two reasons for this.

1. It is not clearly stated in the GZH's regulations
2. In the case of the Oostvoornse meer, there are more parties involved, such as the Waterschap, which makes it unclear whose district of authority belongs to the Oostvoornse meer.

³⁹ <http://www.thefreelibrary.com/Investing+in+culture%3A+underwater+cultural+heritage+and+international+...-a0199537517> (5th of June 2010)

⁴⁰ http://wetten.overheid.nl/BWBR0004471/geldigheidsdatum_05-06-2010 (5th of June 2010)

The other problem is that the diver will have to get caught damaging shipwrecks on the spot – meaning underwater – in order for the GZH to be allowed to give out a fine. This is practically impossible.

Now that we have considered these two problems – subsidies and authorities – we will continue with the necessary solution to preserving the shipwrecks.

8.2 The solution

Let's first cover the issue concerning subsidies. So far, most of the research carried out at the Oostvoornse meer was done on a voluntary basis – Frank Stoop LWAOW. In order to carry on this vital research, it will be advisable to start a foundation which will focus on exactly that including the best possible method of preservation.

Because of the fact that in-depth research into the shipwrecks in the Oostvoornse meer has until this day not been carried out for the full 100%, it is also difficult to state which method of physical conservation should be used. That is why it will be important to start up a foundation which will take care of the actual physical protection of the shipwrecks at the Oostvoornse meer and the monitoring of the shipwrecks in means of degradation, bacteria etc. Besides this, they will also carry out the role of being a provider of information. As they will continue to uncover details about shipwrecks and their historical background, they should stay in close contact with the RCE (for documentation), with the diving centre Capelle (who needs the information to pass it on to the general divers and to the divers taking one of his shipwreck trips), with the local authorities (who will have to stay informed about the state the shipwrecks are in, because it could include a change in management) and last but not least, with all amateur archaeologists who could be interested in the shipwrecks.

Then the solution when it comes to the local authorities. Local authorities could play an important role in the indirect preservation of the shipwrecks, which is control. Opening up any cultural heritage site without proper management and control can lead to irreversible damage of a site. That is why it will be important at the Oostvoornse meer to make rules and regulations.

If the NAS certificate will indeed be implemented together with the permits, the local authorities must be involved in the entire process. There are two reasons for this:

1. The local authorities must be aware of the content of the permits as the eventual aim is to give the local municipality or province of Zuid-Holland the final authority over the lake. The permits given out to divers in order to go shipwreck diving will be derived from the local authorities. The content of the permits should be made by the local authorities in close collaboration with the RCE
2. In order for the permits to be effective, there should also be a checking system: If a diver is shipwreck diving without the official permit, giving out a fine and withdrawing the permit will be the result. This result can only be realised if the local authorities know what to check for in the first place.

Once the permits are created and put into action, it is likely that the GZH will be in charge of checking the permits and making sure that rules are followed.

One other solution to the general problem of there being divers who purposely destroy shipwrecks, is to open up one part of the lake. This might seem contradictory as now everyone would be able visit the shipwrecks, including the bad-intention divers, it could also result into people carrying out a certain kind of social control; making other divers aware of how important it is to treat the shipwrecks carefully.

8.3 Sub-conclusion

Opening up one part of the lake for everyone and by involving the local authorities in carrying out the new set of rules concerning the NAS certificate for the other part of the lake (and so taking care of the in-direct protection of the shipwrecks), the on-going need to protect and preserve the shipwrecks can be realised. This could certainly be achieved in combination with the creation of a foundation which is concerned with the direct preservation of the shipwrecks.

Chapter 9 Results: Investments

This chapter will serve its purpose of introducing where investments should be made and how the Oostvoornse meer could be financially self-reliant (as was one of the objectives of the commissioning client). Also for this chapter the NAS certificate idea has been taken into consideration as the researcher believes this to be the answer to the lake being self-reliant.

9.1 Signposts

It is important to mention again the fact that informing people about the shipwrecks will be the first step towards improvement. As most of the interviewees have said that education is the key towards creating respect, there is the need to place signposts around the lake portraying the historical background of the shipwrecks and the importance of preserving them. According to the observation done at the Oostvoornse meer on the 29th of May 2010, there is no information available to the general public. There are many divers at the Oostvoornse meer who even relate the problem of shipwrecks being destroyed by certain divers, to the lack of information available. They think that because the shipwrecks are not opened up to the general public, there is this kind of secret behind it all which results into curious divers hoping to find treasures, hence the vandalism.

As was stated earlier, every individual has the right to understand and appreciate cultural heritage.⁴¹ This is another reason why the RCE should consider investing in the making and placing of signposts. The placing of signposts will only be a one-time investment, however one that is seriously needed.

At every entrance to the Oostvoornse meer, which is three in total, there should be a signpost. Besides these three, there should be an additional of minimum two signposts which should be placed around the lake next to the biking and walking paths.

⁴¹ http://www.international.icomos.org/charters/tourism_dutch.pdf (7th of June 2010)

The costs related to these signposts were not able to be found as it depends completely on the size, colours and what has to be printed on it. Once it is clear what the signposts will have to look like, the recreation authority of the Province of Zuid-Holland or the provincial state itself can be contacted for more information.

As was mentioned before, if an underwater park is to be realised, it would also be an idea to place signposts underwater which can give direction to the diver as to where to go, or could give information on the background of the shipwrecks and other objects. Again, the prices for these signposts to be placed depends completely on the amount that is needed, the size etc. and so also these prices are not known.

9.2 Foundation

A foundation is normally set up with the idea of realising some sort of objective, or serving a bigger purpose. *It is established as a non-profit corporation or a charitable trust, with a principal purpose of making grants to unrelated organizations, institutions, or individuals for scientific, educational, cultural, religious, or other charitable purposes.*

⁴² There are two types of foundations; a private and a public one. If the foundation at the Oostvoornse meer is to be realised, it is recommendable to start up a public one as it will then have the possibility of receiving subsidies from the government.

This idea was also initiated by Frank Stoop who believes that by creating a foundation which will take care of monitoring and protecting shipwrecks *“the quality and avoidance of serious damage to the shipwrecks can be assured”*. This also means that if such a foundation is to be realised, Frank Stoop should be the one to initiate this and find the appropriate parties to involve.

The eventual aim for the foundation will be to become more financially self-reliant. One way of reaching this is by donating a certain percentage of the NAS courses given at the Oostvoornse meer to the foundation. As the NAS course is concerned with shipwreck diving, it would also make sense to promote the conservation of shipwrecks by means of a small donation.

⁴² <http://foundationcenter.org/getstarted/faqs/html/foundfun.html> (7th of June 2010)

Another benefit of having a foundation in charge of the preservation of shipwrecks, is that they can make use of the divers who have their NAS certificate. Those divers could play an important role as being volunteers for this foundation. When there is the interest of a diver in taking a NAS course, we can also assume that those same people will be interested in partaking in shipwreck related activities initiated by the foundation. For example, maybe there will be the need to physically protect some shipwrecks by means of placing nets, however this can not be done by one person only. The foundation could therefore make use of the network of NAS certified divers to act as volunteers to help.

According to Frank Stoop, the following financial overview would apply when this foundation is to be realised:

- ➔ The set-up of a foundation will approximately be: €500, - This will be needed to start everything up, paying the notary etc.
- ➔ Then the operational costs will be about €3000, - a year. This is calculated as following: For about 15 dives a year, for 4 people with an average of €40, - per person per dive (derived from the average price of a shipwreck trip to the North Sea), you come to a total of €2500, - As there are often unforeseen costs and investments needed in equipments, a total of €500, - has been added.

As was mentioned earlier, the RCE (or the LWAOW) could also choose to donate a certain percentage derived from the NAS courses to the foundation. If not, then the government should make an investment of €3000, - a year and a one-time investment of €500, - in order for the foundation to be set-up.

If one part of the lake is to be opened up to the general public, maps should be made for divers which portray where the ships are to be found and what the background of the shipwrecks are. These maps can be given out at the Oostvoornse meer, either at the diving shop, or at the restaurant the Stormvogel. It will be recommended that the foundation is in charge of making these pamphlets as they know where the shipwrecks are located. Then the foundation can choose to make the people pay for such maps, hence the possibility of having another source of income.

9.3 Visitor centre

One solution to keep the costs for investment low is not to build an entire new visitors' centre at the Oostvoornse meer, but to make use of the businesses that are already there. Both the restaurant the Stormvogel and diving centre Capelle have stated to not be opposed to the idea of having shipwreck related objects – such as pamphlets, pictures, showcase with archaeological findings etc. – in their shop/restaurant. It must be mentioned though that those objects mustn't take over their entire business, meaning that a corner in their shop/restaurant can be made available to act as a showcase, however not the restaurant/shop in its totality.

Besides the fact that this idea of making use of the existing businesses is keeping investments low as nothing new has to be built, another benefit is the fact that no extra people – employees who would otherwise have to work in the visitors' centre – are needed.

The exact amount needed to make the possible scale model of a shipwreck, pictures and other shipwreck related objects, is difficult to define as this all depends on several different aspects. This will only be a one-time investment from the government. The pamphlets on the other side can be the responsibility of the foundation, as they hold the latest updates about the shipwrecks.

9.4 Local authorities

In order for the local authorities to be involved in the indirect preservation of the shipwreck – carrying out the control on permits and checking if everybody is following the set rules – the local authorities do need to get the appropriate resources to comply with this. If the local authorities want to make sure that the management of preservation is carried out appropriately, they will need to put extra people on the job. As extra people will be needed to take care of the control and checking, so are also probably an extra car and other equipment. This all needs to be financed. Robert Paling from the GZH could not give the researcher a price, as it depends on many factors and it still needs to be worked out. This is why the commissioning client needs to get in contact with the GZH in order to see what can be done and who will finance all this.

9.5 Sub-conclusion

Educating people by means of signposts will have to be the first investment to be made by the government. At the same time a foundation should be created which will take care of the preservation of the shipwrecks. In order for the foundation to be started up, a one-time investment should be made and a probable yearly donation should be made, if not chosen for the percentage from the NAS as a donation. After having implemented the NAS certificate to be the ticket to shipwrecks diving, a small percentage of the NAS courses should be donated to the foundation. Then last but not least, making use of the existing businesses to function as a place where visitors can get information about the shipwrecks, investments will be kept low, however some is needed in order to kick-off.

Conclusion

The Oostvoornse meer sure is a special place. Besides the fact that it is believed to be a haven for divers, also hikers, bikers, wind surfers and other recreational visitors can find what they are looking for. The area around the Oostvoornse meer is a protected nature reserve, including a protected bird area.

There are countless objects to be found in the Oostvoornse meer, ranging from cars to 17th century shipwrecks. The reason why the Oostvoornse meer has so many shipwrecks is because the lake used to be a passage-way for ships on their way to the open sea or to Brielle and Rotterdam. The specific route where the Oostvoornse meer is now was a dangerous route, as it was quite shallow, which resulted into many ships that never came past this point.

As nature gradually took over, the shipwrecks were buried under a thick layer of sand which protected them from oxygen (so hardly any bacteria were able to live on them) and partially kept the pieces together. This however changed when the Maasvlakte 1 project was initiated. As land was reclaimed from the sea, sand was also taken from the Oostvoornse meer in order to realise this project. This resulted into the shipwrecks becoming visible and so it was soon after that people discovered the graveyard of shipwrecks.

Now, anno 2010, there are still many objects in the Oostvoornse meer yet to be discovered and researched. Due to the lack of subsidies, and maybe interest, this vital research to uncover the historical background of the shipwrecks is until this day not fully realised. This automatically leads us to one of the problems the Oostvoornse meer experiences; divers who don't treat the shipwrecks with respect and who purposely cause damage to them. It was also exactly for this reason that many people were afraid to open up the shipwrecks to the general public, as was the objective of the researcher.

The general idea with the Oostvoornse meer was to make people aware of the importance of the cultural heritage that can be found. Cultural heritage is for everyone and any individual has the right to enjoy it. This however is not yet seen at the Oostvoornse meer. As the heritage of the Oostvoornse meer is kept a secret from everyone, this unfortunately has the result of some divers thinking that treasures can be found. This is one reason why some destroy the shipwrecks. A probable second reason could be the fact that they are not aware of the historical importance of the shipwrecks.

There were multiple possibilities thought of as the research continued. From the creation of a visitors' centre to the making of a scale model of one of the shipwrecks, most ideas were derived with the intention of educating people. This was, and still is, believed to be the most effective way of getting people to respect the importance of the shipwrecks.

To conclude this report, the general view underwater at the Oostvoornse meer, together with all the magnificent objects to be found, of which some carry an archaeological value, this lake certainly has potential to become a renowned diving haven and interesting cultural heritage site, even outside of the border of the Netherlands.

Recommendations

Although there are some divers who might have bad intentions, the researcher didn't believe it to be fair to exclude all divers from enjoying it just because some can't follow the rules. In order for this to be realised the researcher had to come up with a way in which management could provide the solution.

First of all, it will be recommended to educate people. People have the right to know what is in the Oostvoornse meer and where it came from. This should be done by means of placing signposts and information boards around the lake. In order for this to be realised, research on the shipwrecks is needed.

Research should become the priority in order to uncover the secrets behind the shipwrecks. It will only be through this way that people as well as archaeologists, can start to appreciate what is to be found in the Oostvoornse meer. One way of doing so, is to create a foundation (which could be called: "Behoud Oostvoornse meer Stichting"). Through this foundation research can be carried out in order to make sure that preservation is done and the historical background of the shipwrecks is revealed.

One immediate follow-up should be considered: Opening up the part right in front of the entrance the Stormvogel to everyone. This part could become an underwater park where also shipwrecks from other parts of the Netherlands can be placed. The foundation should make maps with information on the shipwrecks and where the shipwrecks are located, which can then be sold (or given out for free) at the restaurant the Stormvogel and/or the diving centre Capelle. The RCE (or the foundation for that matter) could also choose to place signposts underwater with additional information.

As one part should be opened up to everyone, the other (deeper) part should be left to the more experienced divers; the divers who have their NAS certificate and a long-term permit given out by the recreation authority of Zuid-Holland. It should be mentioned to the divers that while one part can be visited by everyone, the more special shipwrecks and more valuable ones can only be visited by divers who are NAS

certified. This could then give some divers an incentive to do a NAS course. There are three benefits for promoting divers to do a NAS course:

1. As the NAS course is rather expensive, this will hopefully separate the bad-intention divers from the good ones as this is often a commonly seen phenomenon
2. The NAS certified divers can help the foundation with the preservation of the shipwrecks
3. As it will cost money and effort to be part of the real shipwreck diving group, the involvement level of the divers (and the respect they have for the shipwrecks) will be higher and so they will be less likely to cause damage.

Once divers have their NAS certificate, they can then apply for a long-term permit which allows them to go shipwreck diving to the more valuable ones unlimited.

For the divers who don't want (or don't have time) to get their NAS certificate, they will still be able to go shipwreck diving, however only by means of an organised trip with the diving centre Capelle. The diving centre will also be in charge of handing out the long-term permit, as it will be advisable to have the records of divers in one place.

Besides this idea, it will also be recommended to make some sort of visitors' centre. As sustainability was an important subject during this research, it will be important to make use of the resources there are at the Oostvoornse meer. The existing resources are the diving centre Capelle and the restaurant the Stormvogel. One corner of their business can be turned into a part where visitors can take information about the Oostvoornse meer. This could be by means of pamphlets, but also by means of showing pictures of the shipwrecks as it will then be possible for the visitors to visualise what the world underwater looks like.

By all means, the Oostvoornse meer should certainly be opened up to the general public, however management has to be effective. That is why the researcher recommends including all stakeholders involved in the Oostvoornse meer in order to inform them on the management and maintenance of the shipwrecks. If everyone feels equally involved, then people will also be likely to protect the treasures of the Oostvoornse meer.

Afterword

Although sometimes difficult, I very much enjoyed writing this thesis. It was great to have the opportunity to interview people with such interesting backgrounds. At first I was concerned about my lack of expertise when it came to archaeology and the fact that I didn't (and still don't) have a diving certificate, however this completely changed after having interviewed all those interesting people.

As there were many stakeholders involved and all with different interests and expectations from my thesis, it was often hard to make sure everyone's needs were taken into consideration. I really do hope that this report has shown my concern I had (and still have) with everyone and that all stakeholders will find what they are looking for in this thesis.

However much I enjoyed writing this thesis, I'm also happy that it has reached its conclusion which will hopefully be of use to those people interested and involved in this specific subject.

Thanks to all! I hope you have enjoyed reading it.

A handwritten signature in black ink on a light background. The signature is stylized and appears to read 'Diana Nijland'. It features a large, sweeping loop on the left side and a vertical stroke on the right side that extends upwards and loops back down.

Diana Nijland

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Appendices

Transcript of interviews

Interview 1

Date: 19th of April 2010 (Monday)

Time: 13:00 – 14:15

Place: Amersfoort

Name: Wouter Waldus

Company: ADC Archaeology (advising organisation in archaeology)

Function: Maritime archaeologist

- His knowledge on the Oostvoornse meer

Mr. Waldus said that the Oostvoornse meer used to be a route where boats went through (the Maasmonde). Then they decided to close this route, using a delta plan. The result from this delta plan is called 'Maasvlakte 1' and was implemented in order to make this area a natural reserve. When this project started the LWAOW (another company concerned with shipwreck diving and archaeology) was brought on board in order to take care of the archaeological part.

He also mentioned that they are now working on a second project (Maasvlakte 2) in order to expand the harbour of Rotterdam. Mr. Waldus is involved in this project as he is doing the archaeology fieldwork research for the Maasvlakte 2.

He believes that the view in the lake (underwater) is fairly good, especially for Dutch standards. With this he means that in general the view in the waters in Holland is rather indistinct and muddy. He also said that it is fairly easy accessible for divers to reach the shipwrecks.

Some of the boats are located on 40 metres depth of the lake, however some can also be found on 15 metres. He believes that tourists shouldn't go diving deeper than 15 metres. Most of the shipwrecks are from the 18th, 19th and 20th century.

In general he certainly believes that the Oostvoornse meer is a nice (diving) area in the Netherlands, although he personally does not think the shipwrecks are 'beautiful'.

He told me I should check the reports made by **Pery plus**, which is all about the Oostvoornse meer, which ships there are etc. This report is the result of a sonar research of the lake.

- **Examples of other shipwreck areas in the world which are opened up to the general public and which are working well.**

Mr. Waldus mentioned that there are many shipwrecks in Malta which are opened up to the general public and which are really popular for divers. He also mentioned Marseille as an example of shipwreck areas where management is well put into action.

- **How are the shipwrecks treated by those divers that are already present at the Oostvoornse meer?**

Mr. Waldus told me that divers do not appreciate nor respect shipwrecks in general. They damage most of the shipwrecks, they ruin a lot and they often just take entire parts of the shipwrecks underwater as a kind of treasure. He thinks that sometimes shipwreck sites should be completely banned from the general public. People/divers often think that there are treasures to find and so they just completely tear ships apart.

The actual physical protection of shipwrecks from people is really difficult because there will always be people/divers with bad intentions. He also mentioned that another reason why it's difficult to keep divers from stealing and damaging boats, is because a lot of the divers have really good equipment, often even better than the actual professional (archaeological) divers. He also said that these 'bad-intention' divers have more time on their hand, have much more patience and often have much more money to spend on special equipment.

He said that many of these divers have underwater scooters (and more amazingly, water scooters that don't create bubbles you can see from above) and so it is practically impossible to track those guys.

The other problem is that if you do catch people damaging these cultural heritage sites, there is almost nothing you can do about it, not even by if the police.

- **When opening up the shipwrecks in the Oostvoornse meer to the general public, what should I think of then? Any tips/advises, especially on how to deal with 'bad-intention' divers?**

He said that first of all people really need to know the history of the shipwrecks; they need a story they can relate to. I should inform the people how to deal with shipwrecks (as means of instructions) and I should try to make more of an experience out of it. People need to know what they are dealing with, how much value it has and how important the shipwrecks are in order to gain more respect from the divers towards the shipwrecks.

He also mentioned that I should pick out only a few shipwreck/sites where people can dive on and then preferably shipwrecks where there is nothing really to loose anymore (the least vulnerable ones). The most special ones and the ones worth the most should preferably be avoided.

About the 'bad-intention' divers, he suggested that maybe I should integrate a kind of system where people need to sign in before wanting to go diving. Divers will first have to be informed on the importance of the shipwrecks and should be told that taking anything from the shipwrecks is not allowed. The combination of informing people and the fact that their names are known before the dive, could make people more aware of the value of the shipwrecks and could keep them from damaging the shipwrecks.

- **Picture of the possibilities of the Oostvoornse meer**

Mr. Waldus gave me a step-by-step plan on what I could do:

1. Advertise in a diving magazine. The ad should say: "Always wanted to go for a shipwreck dive with a maritime archaeologist? Now it's possible at the Oostvoornse meer!"
2. Once people have signed in for this dive, the day will start with instructions on the boats themselves; the history, a story people can relate to. Then they will all get a different assignment on what to look for or on what to do. The dive will start.
3. The archaeologist divers will lead the group to the shipwreck and will supervise on what people should do. Everyone is performing his/her task.

4. The group will all get together after the dive and will have an evaluation on what has been seen and done.

Mr. Waldus said that this could be done with the collaboration of the LWAOW, as they have many amateur archaeologists and divers.

- **Now this has been made clear, let's go back to the ADC heritage. What does this company do? What is the background? What is your part within the organisation?**

The ADC heritage is a company functioning always through other companies. They get archaeological assignment from (for example) the state and they will have to carry them out. The assignments are always concerned with research on endangered objects found by some one or some company. They never do assignments just by themselves; they don't seek it, they get it.

In general, there is an archaeological policy which says that all archaeological objects found should stay in its original position (in situ), however sometimes this is not possible and so that is where the ADC heritage is for; digging out objects which are part of cultural heritage.

In total the company exists of 100 full time employees and about 40 freelancers. The maritime archaeologists department consists of 3 people.

They are located in Amersfoort and are mainly operating in The Netherlands and in Belgium, however they are trying to expand to other countries as well.

- **What they do**

1. Someone or some company wants to build something (a big construction project) where the surface of the physical construction is bigger than 100m², 150m² or 200m² (depending on the province and town hall you're in), because then you're obliged to ask a company to perform archaeological research.
2. The ADC heritage comes in to check out if there is anything in the ground or in its direct surrounding which might have an archaeological value. They make an inventory on what is there and what the value is of the objects found.

3. They determine whether or not it is worth digging it out (money-wise) and whether or not the object will get damaged if it does stay in its original position. Then the decision will be made and will be put into a report.
4. This report will be send to the department of cultural heritage of the Dutch state and they will decide what to do.
5. If the government decides that digging up the objects is for the best, the ADC heritage will have to ask for a warrant to dig it up.
6. Once the warrant is given out and the object(s) has been dug out, the object(s) will go to the archive of the province where the object(s) were found.

THANK YOU!

Interview 2

Date: 19th of April 2010 (Monday)

Time: 18:00 – 19:45

Place: Vlissingen - Souburg

Name: Fred Groen

Company: Wrakduik stichting 'de Roompot' (wreck diving society 'De Roompot')

Function: Creator of society / amateur diver and amateur archaeologist

- About the society

The society has 20 members, which all pay 50 Euros per month. The society lives of donations. Fred Groen is the initiator of this society. He started diving when he was 7 years old and so has been a diver for 40 years. In 1988 he started his own diving school and has kept that for 14 years. Then in 2002 he started his society 'De Roompot'. He derived the name from a famous shipwreck which has the same name and there is also a harbour (close to Rotterdam) named after that shipwreck. He has always been interested in shipwreck diving and its history.

The members of the society do have to be able to actually contribute to the work the society does; either being a diver, an amateur archaeologist, a handy man, someone who works well with computer/technology etc. All the members have to do a so-called NAS course (a course for underwater archaeology).

The society also publishes articles and report, however they don't get anything for it. They publish in quite some diving magazines, in newspapers, they have their own website, they report to museums and they pass on information/reports to the department of cultural heritage. Especially for the last one (the department) Fred is quite angry that the society never get anything (in means of money) from them. Fred does all the work (the diving, the researching, the writing etc.) and then they just simply pass it on to the department of cultural heritage. He would really like to get **subsidies** for this, as he is doing useful work for Dutch cultural heritage.

He told me that every object found that is older than 50 years, is officially part of cultural heritage. When you find an object you first of all are obliged to report it to the department of cultural heritage. Then, if you have the equipment and means to take

care of it (making sure to keep it in perfect state), you can keep it, however you can NEVER sell it; for own use only.

The society of Fred does a lot of 'unofficial' projects for the department of cultural heritage. Why unofficial? Because the department of cultural heritage is not allowed to give official assignments to the society (or any other for that matter), as there are too many rules when official assignments are given that are concerned with diving (the law of labour/arbodienst). This system is the same for any other company that has divers, so it is always done 'sneakily' and 'undercover'. He told me that the department of cultural heritage gives a vague tip on where a ship might be (however the department knows it will be there for sure, so it's all very sneaky) and then the society goes to have a look and 'by accident' they find a shipwreck.

The society finds about 6 to 7 new undiscovered shipwrecks a year. They find it either by the 'help' of the department of cultural heritage or by fishermen who get their nets stuck somewhere (and think it might be something) and the first person they call then is Fred Groen. Fred Groen also has access to the database of the department of cultural heritage, so that's another source of where objects might be. Last but not least, Fred Groen also gets his information from the 'rijkswaterstaat' (the state department of Dutch waters). The rijkswaterstaat has to make sure all boat routes are safe and clear of any blocking risk (such as shipwrecks). As soon as they find something they believe to be a shipwreck, they call Fred Groen who will then have a look at it. Again, this is all unofficial.

- **About the Oostvoornse meer**

According to Fred Groen, the lake at its deepest is deeper than 30 metres. Most of the shipwrecks are also found on this depth. The department of cultural heritage is planning on making this lake a kind of depot: A place where endangered shipwrecks coming from other parts of Holland can be put in, as the water in the Oostvoornse meer is stable and has no current, which keeps the shipwrecks from deteriorating.

He is sad to say that many of the current shipwrecks found in the Oostvoornse meer are being damaged by divers; a lot of treasures are taken away and some divers just completely tear the shipwrecks apart.

He told me to check the **Duikforum** (type in: Oostvoornse meer and wrakken) in order to get more info on the Oostvoornse meer.

According to Fred there are 18 shipwrecks in the Oostvoornse meer who have been put on the map and who are of historical importance. Meaning that there are probably even more, however they have not been discovered yet.

One example of a shipwreck he gave me is the 'spare-rib'. This shipwreck has the shape of a spare-rib, as the outside structure of the boat sticks out. This one is called: OVM 1. The sad thing about this ship is that it has been completely torn apart by divers who were probably hoping to find treasures.

- **What do you think of the idea of implementing a system where people have to sign in with their names before going for a dive?**

He initially thought it was a good idea, although he also said that it might not be feasible looking at the size of the lake. As the lake is really big, you would need a post every few hundred metres, which he said would be impossible. Also because there will always be people who will purposely avoid these posts and will still find a way to get in, he didn't think the posts would eventually turn out to be useful. Again, he said that there will always be people with bad intentions. Another thing he mentioned about these posts, is that he was wondering who exactly would take care of the supervising and how I was going to find people (and maybe more importantly, the money) to have people in these posts. As last he said: "What time will these posts close and so, what will happen when these posts close?" "How will you stop people from diving when these posts are closed?" "And what will happen when you do catch people diving?" He also said that there is nothing you can really do when people go diving illegally, first of all because of the police (they are just simply not willing to really do something about that, also because they don't have time for it) and second of all because it's hard to catch them, as they often have underwater scooters with which they can easily get away. Like Wouter Waldus, Fred Groen also mentioned that these underwater scooters are impossible to track as they don't create bubbles you can see at the surface. "So they might be right below you without you knowing it."

- **Do you have ideas on what I could implement at the Oostvoornse meer?**

Fred Groen had many ideas on what I could do:

1. Place signs with information on what's in the lake, its value and its importance
2. "Make the underwater world visible above the water!"
3. You could make a scale model of the shipwreck(s) and preferably a scale model of what the shipwreck(s) look(s) like right now. Like that, people can appreciate it without having to dive, but also divers could be more aware of the fact that the boat should be kept the same as what the scale model looks like.
4. Talk with the local diving schools in order to see whether or not collaboration is possible
5. He also believes that if the Oostvoornse meer will become a depot for shipwrecks, this might have a very positive impact on the lake and its possibilities.
6. He states that having a boat with an engine is not allowed, so boat trips are probably difficult to implement. He also believes that the lake would be too small for boat trips, like what they do on the Waddenzee.
7. I could try to do something with diving courses, either courses for deep diving or diving combined with underwater archaeology. So not just diving, but also adding more value to it; people can actually learn from it.
Important: Beginners dive at: 10 to 18 metres; advanced divers till 30 metres; super advanced divers even deeper (sometimes 50/60 metres)
8. He believes that the Oostvoornse meer should be kept accessible for everyone; he doesn't believe that a total ban on diving should be done, as people will always find a way to get it. The thing that you must do is educate people; make people have more respect for what's in there
9. Underwater tunnels which go past the shipwreck; making the shipwrecks also accessible for people who can not dive (or, as Fred Groen said: "Something to do for the partners of the divers.")
10. Underwater aquarium; again, people without the ability to dive can also have a look from up close what the shipwreck(s) look(s) like.
11. Other underwater construction (a kind of concrete plateau where people can look down through holes)
12. Little submarines in order to transport people to the shipwrecks

- **Examples of other shipwreck areas where management is working appropriately?**

Fred Groen told me about England, where people can 'adopt' a wreck. The programme is called **adopt-a-wreck** and is meant to make people aware of the value and gives a person or a group of people the authority to do research on a shipwreck in order to contribute to maritime archaeology and research. At the end of the year they will have to file a report to show their findings. According to Fred Groen this system is very good as it makes people gain respect for a shipwreck, rather than damaging it, like what often happens in Holland.

Another good example is in Malta, where there have been many shipwrecks being put in one place, like a depot. People are handling it well and the shipwrecks are relatively well maintained.

Bad examples however, Fred mentions the '**Thistlehorn**', which is located in Egypt. Apparently there are way too many boats with way too many people on board checking out the shipwreck, day after day. This is causing quite some damage to the ship.

A second bad example is the **MFP920DM**, which is also damaged a lot by people and divers.

- **Other important information**

Fred mentioned that the NOB (Nederlandse onderwatersport bond: Dutch society for underwater) is also working on making an authentic tourist product at the Oostvoornse meer. This could either be a risk for me (as the NOB is purely doing it for commercial benefit), or it could be advantageous as we could maybe work together on some points.

THANK YOU!

Interview 3

Date: 22nd of April 2010 (Thursday)

Time: 10:00 – 11:15

Place: Almere

Name: Annemarie Pothaar

Company: VAEE (Vereniging voor Archeologische Experimenten & Educatie; Society for Archaeological Experiments and Education) and she is also working for the town hall of Almere where she is concerned with archaeology and education; making events around archaeology in Almere

Function: Making archaeology available to the general public

- About the society VAEE, her function for the town hall & Almere in general

The society VAEE is all about archaeology and education. It has 240 members, who all pay a contribution of 20 Euros a year. They also have their own magazine. They are concerned with whether or not shipwrecks (or other maritime archaeological objects) are interesting enough to open up to the general public.

When Almere was 'created', many shipwrecks were found of which many still are in the same spot as once found. At 6 spots around Almere pieces of art have been put in order to show people where shipwrecks can be found (as otherwise, people would simply just bike or walk past without realising what's there). Most of the shipwrecks are still under the ground (this is also done on purpose; they dug them in), because they are very vulnerable and so easy to get damaged.

There is a museum in Lelystad where a shipwreck (half complete) is on display; the Ventjager.

There is also a wharf in Lelystad which is specialised on taking shipwrecks out of the water.

In total, a number of 27 shipwrecks have been found in Almere.

The residents of Almere would very much like to take part of a dig-up of a shipwreck. They would also like to know more about the history of all those shipwrecks and the area of Almere.

Mrs. Pothaar is concerned with how to make shipwrecks available to the general public. This is her actual job for the town hall. The function is rather new and Almere is also the only town hall that has a function like that (the function is called: Programma Publieksbereik -> Programme of targeting audience). She does this by organising an 'archaeology day' once a year, where she thinks of a different theme each time.

- **How she organises an event / recommendations**

She believes that you first need to attract people and then to make them relate to the subject.

She also mentioned that it will be first important to find a target group; who is your audience? She also thinks it's good to inform the divers on what is going to happen and about the actual shipwrecks that can be found.

Some of her recommendations:

- Signs at parking places for cars (as soon as they arrive, they see where they are and what can be found)
- Signs for bikers who arrive at the lake and general signs besides the biking routes around the lake
- Signs for divers in order to gain their respect for the shipwrecks
- A diving course for adults
- An archaeological exhibition
- There should also be something to do for the children
- The possibility of doing a boat trip (a boat without an engine, as you're not allowed to have a boat with an engine on the Oostvoornse meer, at least not without a warrant) where people get a little GPS machine with which they can find the shipwrecks. You can either give people the shipwreck coordinates to make it a little easier, or just simply a GPS system and they will have to find it themselves. When shipwrecks are found, people get information on their GPS machine about the shipwreck
- For the younger people (the youth), you could implement a kind of text message system. Every time people walk or bike past a certain point, they get a text message about what can be found and what they are looking at. She believes that the youth is very much into technology, so this kind of system would relate to them.

- Place a fake shipwreck; something that looks like one of the shipwrecks which is actually in the lake. With that fake shipwreck people can see how special it is. They are also allowed to touch the fake shipwrecks, whereas the real one underwater can not be touched. They can learn from it, its history etc.
- Pamphlets should be placed at the diving schools and restaurants around the lake

Important: Find out why people go to the lake; to bike, walk, dive etc.? For how long will they stay? How often do they go there? Are they alone, with friends or family?

- **Practical recommendations when handling with the Oostvoornse meer**

In Almere she mentioned that they have 'area managers', she thinks that maybe the Oostvoornse meer will have the same; I should try to contact those people.

She recommended me to do only qualitative interviews (so no surveys) with people that I find around the lake. She believes I should do the surveys online (with Enquettes Wizzard; Survey Monkey) as this will save me a lot of time.

She told me that for statistics and research, I could ask the town hall of Rotterdam to give me the information.

HAVE A LOOK AT WHAT IS THERE AROUND THE LAKE!

In my recommendations I should aim for continuity, so not one time events, but events that come back every year/month/quarter etc.

My advisory report should have the following features:

- Who will make use of it
- Who wants to cooperate
- Which activities should be carried out

After that, it is up to the state what they want to do with it. She thinks that the project is too big for me to carry it out completely, so an advisory report is more than enough.

➔ I have to start with analysing everything

- If I think of activities, I should keep in mind what the people want. Do they want experience? (then I could think of an events where people will dress up) Or do they want information? (then texts and pamphlets are important)
- I should make a step-by-step plan for each scenario/situation. You name the activities and show its continuity.
- She believes that it is not a good idea to have a ban on diving at the Oostvoornse meer.
- Get the province, town hall, all the marketing companies plus management of the lake in general involved and get them to want to work with me
- From whichever direction someone comes, you will get information; either on signs, pamphlets etc.
- Make a map with all the recreational possibilities of the lake
- The concept will be stronger and better if existing companies are involved, rather than making entire new businesses. Then the existing companies will want to cooperate for sure.

Important: Spoil the divers at the Oostvoornse meer. Let them join an archaeologist with a dive a few times a year. This will help them to have more respect for the shipwrecks, as they feel special themselves.

- **Examples of other projects, which can be beneficial for me to have a look at**

Check out the national park the 'Oosterschelde'. This park holds many examples of which possibilities there are when handling precious and vulnerable areas.

I should go to Lelystad, to the state ministry of cultural heritage. I should check out the shipwrecks they have on display and check out the database/library.

Important: Make a schedule! An A3 paper with idea; a brainstorming sheet.

THANK YOU!

Interview 4

Date: 22nd of April 2010 (Thursday)

Time: 19:00 – 20:30

Place: Rijswijk

Name: Frank Stoop

Company: LWAOW (Landelijke Werkgroep Archeologie Onder Water: National workgroup of archaeology underwater)

Function: District manager of Zuid-Holland

- About the LWAOW

The LWAOW is a society which is part of the more general AWN (archeologische werkgemeenschap voor Nederland : Archaeological working community for The Netherlands). The AWN has 20.000/30.000 members which are mainly amateurs. The society has a membership fee of 40 Euros a year.

Like with the society 'de Roompot' (interview 2), the LWAOW is also not allowed to carry out direct projects for the State Ministry of Cultural heritage; it's done on a sneaky way.

- About the Oostvoornse meer (history)

The lake used to be 'the mouth' of the Maas (a big river going through The Netherlands). It used to be a sailing route for boats, however then the Delta-plan was carried out, which led to the creation of the lake.

When the Maasvlakte 1 was carried out, they needed a lot of sand. This sand was taken from the Oostvoornse meer and so many shipwrecks were discovered as they were then able to detect them.

- What's there at the Oostvoornse meer?

➔ The south side of the lake, the coastal side, is a national park and bird park and so can not be touched.

➔ The water of the lake is rather clean. You can have a boat on the lake, however you do need a warrant for that.

➔ There used to be kite-surfers on the lake as well, however that is not allowed anymore.

- ➔ There is a pipe construction in the lake which lets salt water in the lake for the shipwrecks. However the amount of salt led in the lake can not be too much.
- ➔ There are at least 20 shipwrecks in the lake of which most are made of wood. The oldest one is from 1596. There are also a few iron shipwrecks and there are even some parts of airplanes from the WW2.

Important: Check out website 'natuurlijk oostvoorne'

There are a lot of divers at the Oostvoornse meer, however most of them don't even know there are shipwrecks in the lake in the first place. There are only a few who know and they are also of course the ones who are damaging the shipwrecks. This lack of knowledge is probably also the reason why these divers have no respect for what's in there; they don't know the value of what's there.

There are 4/5 shipwrecks which are frequently dived on. These shipwrecks are also the ones which are damaged the most. Mr. Stoop thinks that the beginner divers are the ones that put on the most damage on the shipwrecks, as they sometimes rest on them, or touch them etc.

The most valuable shipwrecks are the ones which are located at the deepest points of the lake; 40 meters (max.)

There are 2 diving schools around the lake, which was the initiative of Rotterdam (the harbour of Rotterdam to be more exact). There is also a windsurfing school

During the summer days there are thousands of people in and around the lake. It attracts that many people because of the clean fresh water and the many beaches that can be found around the lake.

The infrastructure is rather good, however you can only get there by car; no possibility to go by public transport.

- **About the shipwrecks in the Oostvoornse meer**

- ➔ There is a shipwreck from the time of the VOC
- ➔ There is a shipwrecks from 1903 with is called the Trawler Svrak
- ➔ There is an old cargo ship from 1884. At least 15 men were drowned together with the ship.

- **Possibilities/Opportunities of the lake / recommendations**

- ➔ First of all, Mr. Stoop thinks that Rotterdam should make the Oostvoornse meer into a depot; a place where shipwrecks from other parts of the Netherlands should be placed.
- ➔ He says that the lake is a very good place for recreational activities. It could be a unique recreational area where nature and cultural heritage is the key.
- ➔ There are many biking routes around the lake where a lot of people go past every day; I could do something with that
- ➔ I could implement the possibility for people to take a technical diving course, meaning that people can go diving really deep, with 2 oxygen bottles in stead of 1 and with different (more high-tech) equipment.
- ➔ He think that the diving school which already exist around the lake are very important; I should collaborate with them, seek out possibilities to do things together.
- ➔ The Oostvoornse meer is special, as it is one of the deepest diving places in the Netherlands (40 metres). This should be pointed out; used as a marketing tool.
- ➔ Rotterdam has a special budget for the creation of the Maasvlakte 2 (which also within the same area as the lake), so Mr. Stoop says that maybe they will also have a little budget for the Oostvoornse meer. OPPORTUNITY
- ➔ He recommended me to give out where the shipwrecks are located. Many people are afraid to reveal the location, however Mr. Stoop thinks it is a good idea to reveal it, in order to let people realise how special the lake is.
- ➔ He told me that if I really want everything to work out, I have to talk with the authorities; Rotterdam as well as the province of Zuid-Holland.
- ➔ He thinks that the shipwrecks should remain on the same spot as they are now; don't remove them (to somewhere deeper for example), as damaging them will be a high risk.

- Mr. Stoop told me about the many caravan parks which are in the near surrounding of the lake. I should try to contact them as well.
- The Westvoornse duinen (the dunes) are in the same area, including many bikers, walkers. That is why he thought it would be a good idea to put signs everywhere around those paths.

- **I asked him whether or not it would be a good idea to make people sign in every time they want to go diving**

He didn't think it was a good idea, because he believes the Oostvoornse meer should remain open and free just the way it is now. He also said that if people really want to do bad, they will anyway. So he doesn't think it's a good idea to order people to do things; again, it should remain free and open.

He also mentions that although it is not allowed by law to touch the shipwrecks, to damage it or to take anything with you, there is nothing really you (nor the police) can do about it. There are no actual punishments for people who damage underwater cultural heritage.

- **What happens when someone discovers a shipwreck?**

The person who discovers something old in general (something with an archaeological value), that person is also the one who will have to pay for the research, the digging up (if necessary) of the object and the place where it will have to be reserved. However, this is not the case with a discovery of something underwater.

This strange law of the discoverer having to pay for the entire process of an archaeological finding leads to many cultural heritage being neglected, damaged or even more commonly, entirely destroyed.

Every time the LWAOW, or any one else for that matter, discovers a shipwrecks, the state ministry of cultural heritage has to be informed. The state ministry of cultural heritage doesn't have a diving team of its own (anymore at least, they used to have one), so most of the discoveries come from individuals. Mr. Stoop did tell me that the state ministry of cultural heritage is working on creating a diving team again.

- **Examples of other projects alike / or things to check out?**

He told me to check out the cultural heritage centre in Lelystad. Another thing I should check out is UNESCO.

An example he gave me was the: Straatvaarder (from the time of the VOC) where a lot of research has been done.

THANK YOU!

Interview 5

Date: 3rd of May 2010 (Monday)

Time: 9:00 – 9:50

Place: Amersfoort

Name: Marjolein Woltering

Company: ADC Archeologie

Function: Advising and communication in archaeology

- What do you do to ‘communicate’ archaeology to the general public?

When there is a dig up of archaeological objects, there are always people who want to see what it is like; there is always some sort of interest shown in the dig up. She believes that using media in a good way is very important when wanting to attract people. She says that media in combination with asking for attention is the key.

With certain dig ups there is nothing much to see, for example certain objects which come from the Stone Age and are not necessarily interesting. In cases like this, she recommends using enactors to make it more attractive and interesting.

She uses all sorts of activities in order to make archaeology attractive:

- ➔ Turning a dig up into an ‘open day’, where an exhibition is also implemented
- ➔ Using enactors to make the objects (and/or dig ups) more interesting and more tangible for the public
- ➔ When new reports are published concerning archaeological objects, she then organises a book presentation

They haven’t done a lot of events concerning underwater archaeology, because the state ministry of water (rijkswaterstaat) is mainly doing this.

Most of the assignments she gets are from town halls who want to make their archaeology known. She then does the communication of the event.

- Do you have any recommendations for me with the Oostvoornse meer?

First of all, she thinks it’s important to involve the local diving communities and give them a small role in the maintenance of the shipwrecks; a responsibility. They should contribute to the sustainability of the cultural heritage.

She says that England is a great example of how to make cultural heritage accessible to everyone. The **British council of archaeology** really tries to involve the general public to the world of archaeology. I should check this out.

I should make a clear plan in advance in which I point out the target group and my general goal. She believes that it's better to choose one or two target groups, than trying to please all target groups. Target groups like:

1. Divers
2. Walkers, as they are already interested in nature. (Placing signs around the lake with pictures and explanations etc.)

She strongly believes that by involving the divers in the process of responsibility towards the maintenance of the shipwrecks is the key. Make them feel important and indispensable. She said that I should try to turn everything around when talking about responsibility; you can't stop the bad ones from doing anything illegal, because they will do it anyway.

Another recommendation she gave me was to put all the information and knowledge about the shipwrecks open to the general public, rather than keeping things a secret. When opening up all the information you can at least notice when something is missing from the shipwrecks, or something is damaged. Again, bad people will always be around, so you might as well inform people on what's there, rather than what the government is doing now (being too afraid to open it up).

The thing I should do next according to Marjolein is to talk with the diving communities and societies. And when I do, she recommended me to be well prepared.

She believes that organising a 'one-time-only' event can be very useful when wanting to promote something.

She certainly recommends using the press if I want to promote the Oostvoornse meer and give out a press release.

- **Examples of one her projects**

She has once organised a 'day of archaeology' in Katwijk, which was in August last year. This day was part of the touristic market with the theme of archaeology. There was also a possibility for children to dig up objects in a playful way. This day was literally for everyone; from the youngsters to the elderly.

She also did an event in IJsselstein where the goal was to promote a hill which was once used as a grave (grafheuvel). She made folders and organised a 'one-time-only' event.

NOTE: Everything that is found in the waters of the Netherlands is automatically in hands of the government.

THANK YOU!

Interview 6

Date: 3rd of May 2010 (Monday)

Time: 12:30 – 14:15

Place: Eindhoven

Name: Peter Seinen

Company: Mergor in Mosam stichting

Function: Member of the society, part of the coordination of fieldwork projects, keeper of samples and taking care of the reporting of shipwrecks and other underwater related objects

- What is the Mergor in Mosam society?

The Mergor in Mosam society is a society which is a member of the AWN (Archaeological Workgroup of the Netherlands) and then the AWN in Nijmegen in particular. Most of their members live near Kuik. The society consists of amateur archaeological divers and they are active all over in the world. For all of the members diving and archaeology is purely a hobby, so they never get paid for any services they might provide the government with. Mr. J. van de Besselaar is the one who started the Mergor in Mosam society.

The LWAOW is a work group of the AWN (the wet one; where the water begins and the AWN stops, the LWAOW continues), so Mergor in Mosam often works together with them. However, he does mention that 'working together' might be too much of a statement as the LWAOW and Mergor in Mosam exist only in a one-way street; Mergor in Mosam provides the LWAOW with information, however never the other way around.

According to Peter, the AWN has 50 to 100 members who are active in underwater archaeology. The AWN is also the one which gives the NAS 1 course, which includes 2 dives in the Oostvoornse meer. When someone completes the NAS 1 course, they get an official and internationally recognised certificate. There is also a NAS 2 course – Martijn Manders gives this course – which is far more serious than the NAS 1.

Peter explains that the LWAOW organises a 'shard' day, where all members of the AWN are invited. Peter states that, besides the shard day, the LWAOW doesn't organise much else, however they are handy for connections.

Officially the members of Mergor in Mosam are scouts, who obtain information, discover new underwater objects and then report to the RCE (state service of cultural heritage). When the reporting is done, the Mergor in Mosam society hopes to be part of the research team.

- **So what happens exactly when the Mergor in Mosam society finds something?**

As soon as they find something, they report it to Mr. Manders from the state service of cultural heritage. Then it could happen that Mr. Manders would like to know more about it and so he gives them an official approval to do research; to pinpoint the structure of the shipwreck. First there is phase 1: Drawings are made from the measurements. Then they start phase 2: With the drawings and more measurements, dimensions are created and more details revealed about the construction of the ship. Sometimes, but always with permission from the RCE, objects from the shipwreck are taken out. Then a report is made with the findings and exact measurements.

Mergor in Mosam is also able to detract shipwrecks from the water, as they are in possession of the right material; for examples pumps to suck or blow away the sand around the shipwrecks. Again, this can only be done with permission from the RCE.

Peter also mentions that the RCE used to have 6 own divers in Lelystad (which used to be called NISA), where Mr. Manders was also one of them. He thought that by now there were only 2 left, however he was not sure about that.

- **What can you tell me about the Oostvoornse meer? What are your suggestions on what to do with it?**

First of all, Peter mentioned that he/Mergor in Mosam does not necessarily want to be involved with the Oostvoornse meer, because he believes that it is more Frank Stoop's project and lake. According to Peter, Frank Stoop holds all the right equipments and has a permit for a boat, so they should leave him do it. It's Frank's lake!

He mentions that the Oostvoornse meer used to hold brackish water (a mix of salt and fresh water), now they are pumping salt water into the lake.

Peter thinks that it is a good idea to get a boat at the Oostvoornse meer with which you can do boat trips for divers, because most of the shipwrecks are too far away from the 'shore' to be reached without a boat.

He also believes that it might be a good idea to make a scale model of one of the most precious and valuable shipwrecks. This could be placed in a **visitors' centre**. Mr. Seinen believes that if a scale model of a ship is to be made, that it will have to go through Frank Stoop as he will know where the most precious ones are located.

Peter certainly believes that it is a good idea to open up the shipwrecks to the general public -> "Eventually it will disappear anyway, so why not enjoy it now?"

He does mention that it will first be important to outline what is in the lake; to make sure that everything is recorded and stored, because then at least it will be written somewhere. He believes that there is absolutely no reason NOT to open up the shipwrecks to the people; the bad guys will know how to find it anyway. So first, record it and then let the nature go its own path.

One other thing Peter recommended me was to focus only on divers. That should be my only target group.

- **I suggested the ideas other people gave me – the submarines and underwater bridge – to Peter. What did he think about this?**

He believes that the sight underwater at the Oostvoornse meer is not good enough to anything like that.

- **Other information he has given me**

All the VOC objects located everywhere in the world, belong to the Dutch state or actually, to the ministry of finance as they have once bought the VOC. If anywhere in the world something is found that is related to the VOC, the ministry of finance gets involved. Then they are the ones that hire an external shipping detraction company, if the desire to detract it exists.

When someone says that a shipwreck is complete, most of the time this does not mean that it is actually still completely intact; it just means that they are able to imagine what it used to look like, they can reconstruct it (not physically, but hypothetically).

CHECK: Mediator project in Curacao. There is an underwater bridge which was funded by the society of marine archaeology for the Dutch Antilles.

CHECK: Egypt; Eilat (the gulf of Eilat)

THANK YOU!

Interview 7

Date: 29th of May 2010 (Saturday)

Time: 10:00 – 10:30

Place: Oostvoornse meer

Name: Jan Venema

Company: LWAOW

Function: Chairman of LWAOW

- **I understood that there are a few members of the LWAOW who are doing an exam today, what is the exam exactly?**

The LWAOW has a total of 168 members. The LWAOW is the so-called 'wet' working group of the AWN. Meaning that as soon as water is starting to play a role, the AWN stops and the LWAOW continues. So the LWAOW deals with everything that has to do with water and archaeology.

There are 12 people today who are doing an exam in underwater archaeology, the NAS 1 (Nautical Archaeological Society). There are three groups of 4 people and they all get assigned one shipwrecks. One is located on 28 metres below, one on 15 metres and one on 12 metres. The ones which are assigned the 28 metres one are slightly more experiences in diving, as it requires a different approach towards the dive.

They get into their groups and discuss who will do what and what exactly needs to be done. Then they will do a test-dive to see with which shipwreck they are dealing with. After the test-dive there is a little break, because you can't just continue diving; a break is necessary for your body. Then the second dive is meant for the divers to really start measuring the shipwreck. As soon as all the data is collected, they will then have to make a report which is send to Martijn Manders. Mr. Manders is then the one who will either approve or decline the report. When he approves, the divers will get their NAS 1 certificate, which is internationally recognised.

The instructor is Johan Opdebeeck who is also, like Martijn Manders, working for the RCE (state service of cultural heritage). The LWAOW is organising this day, with Frank Stoop being there as the one who knows where the shipwrecks are located. He is also the one who arranged a permit for his boat today, in order to bring the 12 divers to their assigned shipwrecks.

Jan Venema mentioned that people, who want to go deep-diving, need two years of diving experience. This can be done through the NOB (The Society of underwater sports).

- **What is happening with the shipwrecks here at the Oostvoornse meer**

First of all, Jan Venema mentioned this constant flow of salt which comes into the Oostvoornse meer and his statement is that too much salt is certainly not good for the shipwrecks. So the salt water supply was apparently not initiated for the sake of the shipwrecks.

Jan Venema mentions as well that it is practically impossible to check whether or not people steal anything. The problem is that the police has to catch the divers at the moment of stealing or breaking something, however in the Oostvoornse meer this is not possible as you can't track people due to the size of the lake in combination with the bad sight underwater.

On the sea for example, you can see the police coming from miles away, and when the divers do, they throw everything they took overboard.

When shipwrecks are found and which turn out to be 'too' interesting, then people are not allowed to do anything with it anymore; then it belongs to the RCE.

The weekends here at the Oostvoornse meer are always busy, full of diver, kite-surfers etc. However, Jan Venema personally (nor the LWAOW) has nothing to do with all the other divers here. He's only here for those 12 divers who are doing their exam.

THANK YOU!

Interview 8

Date: 29th of May 2010 (Saturday)

Time: 15:30 – 16:30

Place: Oostvoornse meer

Name: Rinus Kenters

Company: Dive centre Capelle

Function: Owner

- Could you tell me more about the divers at the Oostvoornse meer?

Most of the divers here are from around the area and come here to either train or just simply to dive with some friends. Most of the divers that come here don't even know there are shipwrecks here. Also for him this news is quite recent.

There is one diver in particular who is doing a lot of research on the shipwrecks: **Jos**. He has been busy with the shipwrecks for the last few years and he's also the one that discovered them. After he discovered it, it was Frank Stoop who took over. Apparently there have been some problems between Frank and Jos, as Jos felt like his work was sort of stolen from him. This has been resolved and so Frank and Jos are back on speaking terms.

He believes that there are quite a lot of 'bad' divers; people who either steal objects from the boat or worse, who just completely tear the shipwrecks apart, just for the fun of it he says.

- What do you think about opening up the shipwrecks to the general public?

He believes that opening up the shipwrecks is just a bad idea. The divers shouldn't be able to know the exact locations of the shipwrecks, because they will just break everything. He doesn't have faith in divers having respect towards the shipwrecks; they just want to do bad.

- **What is possible to do then, because it would be nice to let at least some people enjoy it. Or you really just think that we should keep it just the way it is?**

Rinus has been busy with starting something up for shipwreck diving, but then it would be done secretly. He bought several little underwater scooters and his idea would be to leave with a group of max. 4 divers with underwater scooters from the diving school towards a shipwreck. People wouldn't be able to see where they are going, as you leave from the dock to the shipwrecks underwater. The divers would all have to be experienced divers, as the shipwrecks are sometimes located on a depth of more than 20 metres.

He believes that beginners shouldn't even be able to go shipwreck diving, as he thinks they are the worst when it comes to breaking shipwrecks.

This idea has not been developed yet, but he does believe that this is the only way of opening up shipwrecks to people.

Most of the shipwrecks are located on the other side of the lake, so he definitely thinks that underwater scooters are the only way to get there. He wouldn't want to go there by boat, because then people would see where they're going.

- **Are you open for collaboration with other stakeholders? What is the collaboration like in general between diving schools?**

He certainly is open for collaboration, however he does mention that diving schools in general are not open at all to work together. They are working for themselves and there is often even a kind of battle between them. But he certainly is open to ideas and new projects.

- **How about putting up something like an information board about what can be found in the Oostvoornse meer here in the shop? Would you be opposed to that?**

He is not opposed to having something in his shop, however he is opposed to the idea of giving out information when it's too precise. What he meant was that he wouldn't mind having an information board in his shop that shows general information, history of the shipwrecks etc., but not something that would include the exact location of the shipwrecks. He believes that giving out the coordinates would attract a lot of bad-intention divers.

- **As motorised boats are not allowed here, what about having electric boats which can be used for trips for the non-divers? For example, letting people (with or without an instructor present on the boat) go for a boat trip with a GPS system and then to go sailing over the shipwrecks. As soon as they are sailing over one shipwreck, they can get information about them on their GPS system. A bit like what they use for museums. After the boat trip, they have to hand in their GPS system again. What do you think about that?**

He likes the idea of having electric boats, however the idea of giving out the coordinates through this GPS system he finds risky. He thinks that people with bad intentions will then also be able to get them. The fact that you have to give back the GPS system is a kind of comfort and maybe could work. However, "Who is going to pay for this?"

- **Actually, why are motorised boats not allowed here?**

For environmental reasons. Just like the whole 'Oostvoornse meer Impuls' project is, of which the port of Rotterdam took initiative. The reason why they build this pump which supplies the Oostvoornse meer with salt water is really all for environmental reasons. As the lake used to consist entirely of salt water, this also attracted specific kinds of flora and fauna. Now that the water was getting fresher and fresher over the last few years, certain kinds of birds and fish and other flora and fauna were disappearing. That is why they implemented this pump, so that these birds and fish etc. would come back. The project had nothing to do with the shipwrecks whatsoever.

He believes that the quality of the water has improved ever since the pump is up and running, however Rinus also mentioned that the pump is not working at the moment; it's broken.

- **Other info**

There are a lot of fishermen here at the Oostvoornse meer. They used to fish the rainbow trout, as they were purposely put in the lake. Obviously you always had to put them back in. Now that they were busy with the pump, they have neglected the implementation of rainbow trout in the Oostvoornse meer, so now they are pretty much non-existent.

You're not allowed to go camping around the Oostvoornse meer. When the sun sets, everyone has to leave. The police come by every evening to check whether or not there are still people around the lake. If you are, you can get a fine.

Rinus gave me a DVD about recreational and technical diving at the Oostvoornse meer.

THANK YOU!

Interview 9

Date: 2nd of June 2010 (Wednesday)

Time: 15:00 – 16:00

Place: Schiedam

Name: Robert Paling

Company: GZH Zuid-holland (Groenservice Zuid-Holland)

Function: District manager of conservation and regulation for the recreation authority of Zuid-Holland.

- What is it exactly that the GZH does?

The GZH makes sure that official nature reserves where there are also some recreational activities going on, are going hand in hand. The GZH is concerned with whether or not the nature reserves are treated with respect and whether or not people are following the rules.

Sometimes it happens that people are destroying nature or setting things on fire. Then they send someone to handle it: arresting people or giving out fines. He mentioned that while the police is motivating the youth to go into the nature (to cause less trouble in the cities), the GZH is sort of trying to get them out and into the cities.

He personally is in charge of the planning and the personnel.

- As the GZH is concerned with the province of Zuid-Holland, are you also active at the Oostvoornse meer

Two third of the Oostvoornse meer is under direct supervision of the GZH. They drive past the lake every day in order to check whether or not people aren't camping there (as this is not allowed) and if the safety is taken care of. As there are both wind surfers as well as kite-surfers, there is sometimes the question of safety between these two groups. They are just making sure that the recreational activities are carried out safely and then mainly the kite-surfer and the wind surfers.

The nature and recreation at the Oostvoornse meer is under direct supervision of the GZH. However, they are not concerned with the divers there. He thinks that Waterschap is in charge of that.

- **Would it be possible for the GZH to also be taking care of the divers there? In means of giving out fines in case they damage shipwrecks?**

It would certainly be possible for the GZH to include the divers in their regulations and to check them. However, there are costs involved if this is to be realised. Obviously they would need extra people in order to do this, which is why they would need to get paid to do so. Also because the GZH does not have an official diver among them, this would have to be implemented, hence the costs involved. But theoretically it would be possible for them to take care of the divers and give out fines in case they damage shipwrecks. This does need to be put somewhere in their regulations, because now there is not really an official rule for this.

However, Robert Paling mentions that he thinks the Oostvoornse meer falls under the supervision of the Waterschap as it has to do with a lake. He told me that with the divers, it is not entirely clear who should take care of the behaviour of them. This is also due to the fact that divers are difficult to check and fine them in case they cause damage, because you would have to catch them on the spot. And the fact that the GZH does not have an official diver among them, makes it more difficult.

- **What would need to be done in order for the GZH to include the checking of the divers in the regulations?**

First of all I would have to contact the recreation authority of Vorne-Putten-Rozenburg, as they are also what the GZH is indirectly working for. As the GZH only takes care of the recreational visitors complying with the regulations made by the municipality, not the making of the rules and regulations itself, the municipality will have to include such rules in their 'handbook'.

Robert Paling also believes that it would be good to include the diving union into getting them to have more responsibility for the maintenance of the shipwrecks as well. They should be the ones to educate the divers in what is and what is not allowed. They should also inform the divers on the actual historical background and importance of the shipwrecks.

He said that in general it will be important to have the shipwrecks monitored, in order to see the possible damage being caused. Monitoring the shipwrecks should be done, because then you also have proof of developments going on underwater.

- **And for example, the making of the signposts (as I want to place signposts at the Oostvoornse meer to inform people on the historical background of the shipwrecks), is the GZH also in charge of that?**

Everything that has to do with informing and educating people by means of signposts is being done by the department of education, which is also at the GZH. He said: "If you want to put something on signposts, you can put your message through me, as they are in the middle of putting up new signposts at the Oostvoornse meer with information on rules and regulations, so it would also certainly be possible to also place signposts with other kind of information."

- **So if I have something in mind that I want to put on a signpost, I can just tell you and it will be done?**

"Pretty much". It will be better to go to the department straight away and tell them what to put on, but you can also tell me in an email."

- **Okay, now that has been made clear, I have one more question concerning the GZH to be involved with the regulations at the Oostvoornse meer. At the moment I am trying to come up with an advice that has to do with permits. Would it be possible for the GZH to 'create' a permit specifically for the divers?**

Yes, this certainly is possible. However, as was said before, you would have to go to the municipality/recreation authority in order for this to be realised. They can create a permit, which you can then give out at the Oostvoornse meer.

- **At the moment, what is allowed and what is not allowed at the Oostvoornse meer. For example, as motorised boats are not allowed, would it be possible to have electrical boats?**

-> Electrical boats are also not really allowed, as they also fall under the category of motorised boats. We don't want boats at the lake because it disturbs the wild-life.

-> You're also not allowed to go camping; this is also due to the fact that it disturbs the nature and its wild life.

-> You are allowed to drive your car on the beach, which is quite exceptional

-> They prefer to not have kite-surfers on the lake, because they disturb the wild-life. It is officially allowed, however they would like to change this

-> You are allowed to walk and bike everywhere around the lake, including the protected bird area.

-> You have put your dog on a leash when entering the protected bird area.

The protected bird area is also referred to as the 'green beach'. The landscape authority 'Zuid-Hollandse Landschap' would like to get the GZH to check the green beach as well. Apparently there are many people there who unleash their dog; they want more checking in this area and the GZH could do that.

- **When you say 'checking', what is the actual authority of the GZH exactly? Can you also really arrest people?**

There are 6 sections of authority, the GZH in section 2. They have the authority to arrest people and give out fines. They are the so-called Boa's. Robert Paling himself has a radio with which he gets direct contact with the police. When they do arrest people, they normally bring them to a police station, as the police has more equipment. The GZH does have its own cell, so they can also arrest people and put them there; it's just easier to place them in a police station.

- **Last but not least, what would be your idea to do at the Oostvoornse meer?**

Robert Paling thinks it's important to first include all possible authorities: recreation authority, Waterschap, Zuid-Hollandse Landschap and Port of Rotterdam. If you want to make the regulations are effective, then all of the above mentioned authorities should be aware and part of it. Collaboration!

You should organise trips, however only with a guide. People have to pay for every dive they make to the diving centre located at the Oostvoornse meer and they should also apply for a permit every time they want to go diving. Robert Paling believes that social control is the key. If you make sure that every one knows that they will have to get a permit every time they want to go diving, they will also hold each other responsible; social control. The benefit of having to get a permit for ever dive is the fact that names are recorded as people will have to identify themselves in order to get a permit. The diving centre Capelle should be the one who is able to give out the permits (which indirectly is through the recreation authority).

Definitely open up the shipwrecks; damage will always be done by divers with bad intention, whether it's opened up or not.

Interview 10

Date: 8th of June 2010 (Tuesday)

Time: 15:00 – 16:00

Place: Amersfoort

Name: Johan Opdebeeck

Company: RCE Amersfoort

Function: Maritime archaeologist

- **Could you first tell me about what it is exactly that can be found in the lake?**

Mr. Opdebeeck told me that he would send me the report with all the details on what is known so far about the Oostvoornse meer.

- **What do you think about the idea of having a NAS certificate to function as a pass which allows you to go diving for the shipwrecks?**

He was not entirely sure whether or not divers would accept having to get and pay for something whereas now they can go everywhere they want and for free. He thought that I would exclude the lower and middle class if they would have to pay; as they might not be able to afford it.

- **Well, I have seen all the expensive equipments all those divers have, so it doesn't seem to me that they couldn't afford it**

That might be true, but I don't think that you can convince divers to pay for something while they could also do it secretly for free. It is practically impossible to check divers whether or not they have a permit and I'm not sure if you're even allowed to implement a permit, as cultural heritage should be free for everyone like it is now. But anyway, how would you convince divers to having to pay for a permit?

- **First all, obviously you shouldn't tell the divers that it is something negative, you should bring it as something special and beneficial. Like, the shipwrecks found in the deeper part of the lake are very vulnerable and they need to be treated as such. If you do want to go shipwreck diving there, you can become part of an archaeological diving team with which you can do research and become part of something important: The**

preservation of shipwrecks and doing valuable research. You should bring it as though they will have the opportunity to be part of a team which will give them added value to their diving experience

Okay, but still, everyone is allowed to go everywhere without having to pay for it. How are you going to check the permits and more importantly, there are divers who know that the checking of permits will be almost impossible to carry out, so they will tell other divers the same and so no one will bother getting a permit. What are you going to tell those people?

- **Again, you should bring it as something positive where divers will be able to be part of a team. And one thing that I have to mention is that my recommendation will also include opening up one part of the lake for everyone. So it will be just one part where you would have to get a permit**

One of things that I still believe to be impossible is giving our permits, because who is going to check? And does this local law of getting a permit overrule the national law of cultural heritage being free for every one? But especially the control is practically impossible, because you would have to catch divers on the spot if they are shipwreck diving with out a permit. And even then, if they get out of the water where there is a shipwreck located below, it is possible that they haven't even seen the shipwreck. You can't just fine people if you don't catch them doing something on the spot.

- **That is true, however I do believe that this is at least better than it is now, as there is nothing going on by means of regulation at the moment. There will always be some bad guys, however I believe that there must also be divers who will stick to this law and who would actually like to do a NAS course and feel sort of 'exceptional'.**

It might be somewhat better as it is now and there will always be 'bad' divers. But who is going to check them?

- **I have been in contact with the GZH who have informed me that they could put such a rule in their regulations.**

Also about that I'm not entirely sure. Again, catching people doing something wrong is really difficult. I do like the idea of having one part of the lake open for everyone, which should become some sort of underwater park. This also means that the lake should be used as a kind of depot where objects from other parts of the Netherlands can be put. The water is still and there is salt, so those objects could survive better in the Oostvoornse meer, than somewhere out in the open. This could then also be an exceptional feature of the Netherlands, as there is no such thing as an underwater park in Europe. So that could place the Netherlands on the map for divers in other parts of the world.

The underwater park could also include having signposts underwater (or on shore) giving directions and information on the shipwrecks.

- **I have heard about this depot idea before. But what happens now with the shipwrecks then?**

It actually often happens that shipwrecks which have been researched, checked and put in the archive, are burned as conservation would be too expensive and if they are not special enough, that is the cheapest option. In order for this to be avoided, as it certainly is a shame, the Oostvoornse meer should be used as a depot.

To go back to your idea again, I do think that it's a good idea to implement this NAS certificate as a pass for people to be allowed to go diving, it could work, but I just wanted to make sure that you do realise the difficulty is has and which things can work against you. I just want to show you the other side of the story as well.

THANK YOU!

Example of questionnaire used

Leeftijd:

Man / vrouw

1. Wat is de reden van uw bezoek aan het Oostvoornse meer?

2. Komt u hier vaker? Zo ja, hoe vaak?

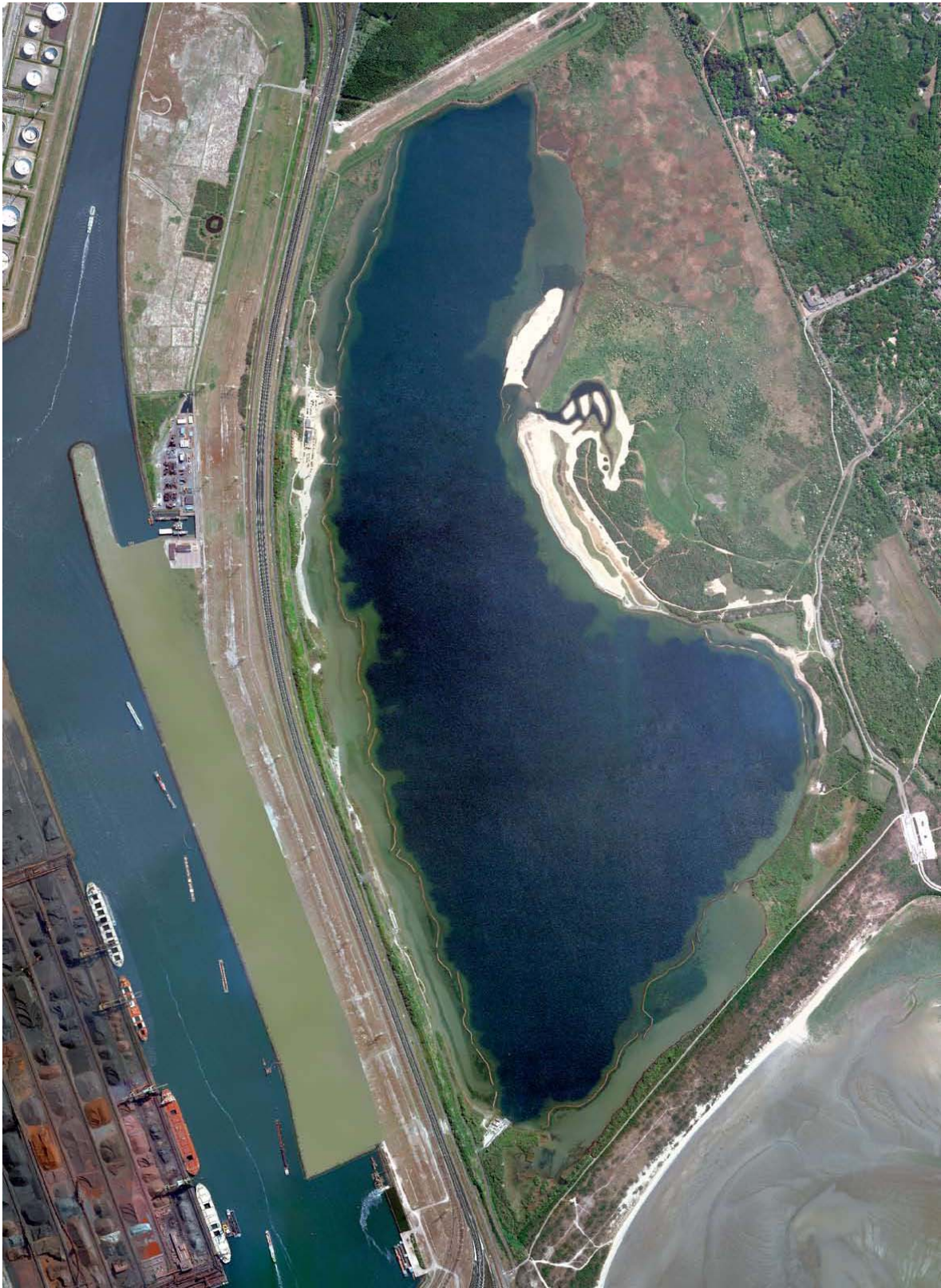
3. Met welk gezelschap komt u hier meestal?

4. Woont u in de nabije regio? Waar?

5. Wist u dat er hier tientallen scheepwrakken liggen die bij het cultureel erfgoed van Nederland horen?
 - ja
 - nee

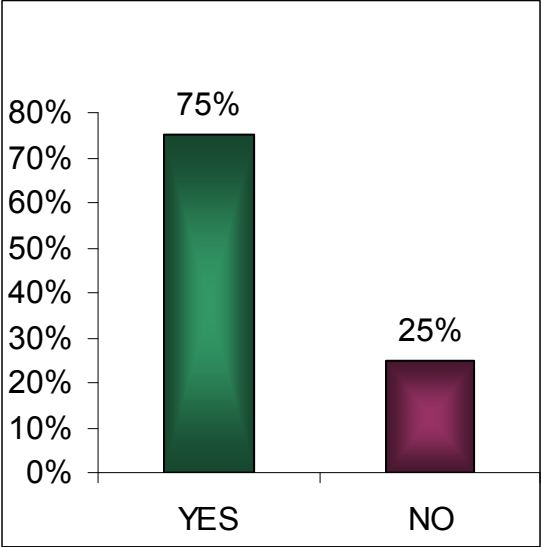
6. Zou u het leuk vinden om meer te weten over deze scheepswrakken?
 - Ja
 - Nee

Picture of Oostvoornse meer from above



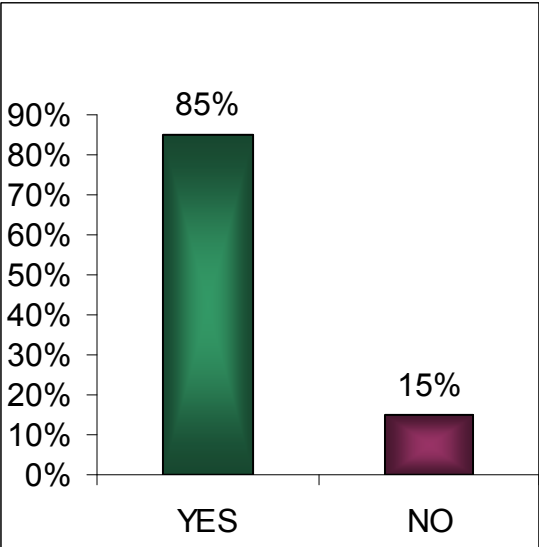
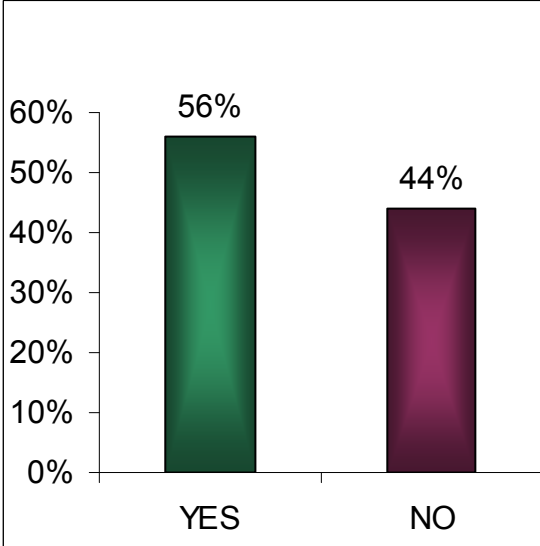
Picture from: Natuurlijk Oostvoornse meer

Other statistic findings



Percentage of total amount of questioned people who are interested in knowing more about the shipwrecks

Percentage of women interested in knowing more about the shipwrecks



Percentage of men interested in knowing more about the shipwrecks