Understanding the Wadden

A research about the very meaning of the Wadden and the idea to assign rights to its nature



MSc. Thesis by Christa van Oorschot

April 2022

Water Resources Management group



Understanding the Wadden

The Netherlands

http://www.wur.nl/wrm

A research about the very meaning of the Wadden and the idea to assign rights
to its nature
Master thesis Water Resources Management submitted in partial fulfilment of the degree of Master of Science in International Land and Water Management at Wageningen University, the Netherlands
Christa van Oorschot
April, 2022
April, 2022
Supervisors:
Dr.ir. Jaime Hoogesteger
Water Resources Management group
Wageningen University & Research

Acknowledgements

Without the people that made time for me to interview them, I could simply not have done this research. Therefore, thank you:

Johan Bakker, Michiel Firet, Joca Jansen, Meindert Schroor, Ernst Lofvers, Wouter van der Heij, Klaas Deen, Jeroen Jansen, Jaap de Vlas, Erika Compatangelo, Gerwin Klomp, Karen Krijgsveld, Hans van Gasteren, Gerrit Dommerholt, Geurt Busser, Lenze Hofstee, Geertjan Smits, Chris Bakker, Melle ten Kate, Robbert van der Eijk, and Martijn Iping;

for your time, trust and openness. I extend my special thanks to Geurt, who showed me the Lauwersmeer on his ship. Melle, sadly we weren't able to go *wadlopen*, I will definitely get a chance when the weather is better. Ernst, thank you so much for bringing me into contact with others: it really gave a kickstart to my research.

Jaime, thank you for supervising me and guiding me throughout my whole research. Thank you also for allowing me to be stubborn from time to time, it made my research process really mine.

Thank you Rutgerd, for making time to talk through my ideas and findings even though you weren't my official supervisor.

Thank you Lieuwe, for showing me the whole coast of mainland Fryslân by car. It was fun and it helped me to understand the thin line between people and sea.

Dear Geert and Mariëlle, thanks for the moments of feedback.

Last of all, thank you my sweet friends with whom I spent hours in the library, in groupwork rooms, and taking breaks. Writing a thesis is more fun with you!

Abstract

The Wadden are a place where nature and people meet. On the one hand, special statuses like UNESCO World Heritage Site and Natura2000 are attributed to the Wadden for its ecological value, while on the other hand a lot of human activity takes place in and around the Wadden, like gas extraction, fishery, and recreation. These often contradicting interests and uses make for complex Wadden management. In a consultancy report of AT Osborne, commissioned by the ministries of I&W (Infrastructure and Waterworks) and LNV (Agriculture, Nature and Food Quality), it was stated that nature improvement goals for the Wadden were not met due to policy decisions, for which several alternative ways of management were proposed. In their scientific paper, jurists Lambooy, van de Venis and Stokkermans argue that the government has chosen a rather 'light' alternative which leaves current duties and powers unaffected, and therefore doubt its effectiveness on the long term. Therefore they propose to grant the Wadden Sea rights by assigning it legal personality. Such a rights for nature arrangement would touch upon the very meaning of the Wadden and of nature, and would affect the actors connected to the Wadden. Hence, this thesis looks into how various actor groups (Coalitie Wadden Natuurlijk (CWN), fishery actors, mining companies, the recreational sector and governmental actors) define the socio-environmental relations of the Wadden, and what stance they take in the debate around granting the Wadden Sea rights. The research is backed up theoretically with the concept of hydrosocial territories and looks through a political ecology lens. It shows that people regard rights for the Wadden in divergent ways, as already at the roots of understanding this area lie contested knowledges, values, and notions of justice. This evokes contemplation about nature, ourselves as human beings, and the characteristics of our society.

Table of contents

Acknowledgements	i
Abstract	ii
Chapter 1: introduction	3
1.1: the Wadden: home to both nature and human activity	3
1.2: rights for the Wadden as an answer to current Wadden management	4
1.3: the research	5
Chapter 2: methodology	9
2.1: interview phase	9
2.2: analysis and writing phase	10
Chapter 3: theoretical framework	13
3.1: hydrosocial territories	13
3.2: hydrosocial imaginaries and territorial pluralism	13
3.3: interests and strategies	14
3.4: stakeholder theory and stakeholder analysis	14
3.5: environmental justice	14
Chapter 4: background	17
4.1: current Wadden Sea governance	17
4.2: Rights of Nature	17
4.3: rights of nature in practice	18
4.4: natureship	19
Chapter 5: hydrosocial imaginaries of the Wadden	21
5.1: Coalitie Wadden Natuurlijk (CWN)	21
5.2: fishery actors	23
5.3: mining companies	25
5.4: recreation sector	28
5.5: governmental actors	30
5.6: conclusion	32
Chapter 6: four values underlying the imaginaries	35
6.1: ecological value of the nature system and unconditional value of the ecosystem	35
6.2: cultural values of the area	36
6.3: value of the people making their living on and around the Wadden	37
6.4: conclusion	38
Chapter 7: perceived consequences of rights for the Wadden	41
7.1: comparison to current system of nature management	41
7.2: doubts about rights for the Wadden	42

7.3: aspects rooted in politics	43
7.4: imaginations about an entity for the Wadden	45
7.5: conclusion	47
Chapter 8: notions of justice of rights for the Wadden	49
8.1: notions of distributive justice	49
8.2: notions of procedural justice	50
8.3: notions of recognition justice	51
8.4: notions of ecological justice	52
8.5: conclusion	53
Chapter 9: discussion	55
9.1: analytical discussion	55
9.2: methodological discussion	61
Chapter 10: conclusion	65
References	69
Annex 1: interview guide	77
Annex 2: overview of the interviewees	79
Annex 3: original quotes in Dutch	80



Chapter 1: introduction

Chapter 1: introduction

This master thesis research explores the very meaning of the Wadden by looking into how different actors that are directly linked to it understand this area. Central to this understanding is the way people view nature and human activity in and around the Wadden. Additionally, this research looks into how actors of the Wadden regard the idea to grant rights to the Wadden nature, as has been happening to water bodies around the world.

1.1: the Wadden: home to both nature and human activity

The Wadden Sea stretches across the Netherlands, Germany, and Denmark. This research focuses on the Dutch part of the Wadden (figure 1), which includes the Wadden Sea, North Sea coastal zone, the Wadden islands and mainland coastal areas. In the dynamic landscape of the Wadden, boundaries between land and water change through space and time. It is a habitat for flora and fauna, as well as a place where all kinds of human activity take place. Among human activity on and around the Wadden Sea are gas and salt mining, fishery, shipping, and tourism. Currently, the interplay between humans and nature is a source for discussion about how people should go around with the Wadden nature.

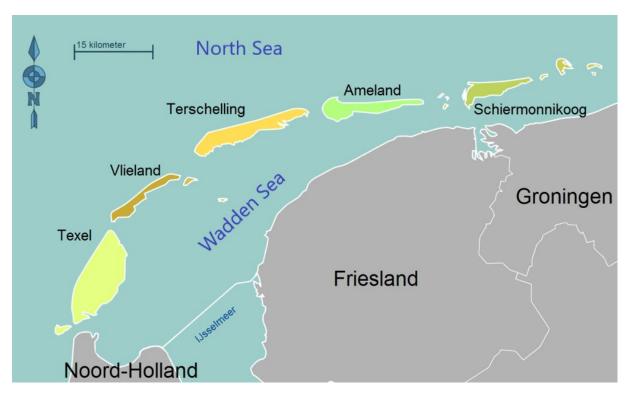


Figure 1 General overview of the Wadden area, showing the water of the North Sea, Wadden Sea, and IJsselmeer; the Wadden islands Texel, Vlieland, Terschelling, Ameland, and Schiermonnikoog; and the mainland of the Wadden provinces Noord-Holland, Friesland, and Groningen (Netherlands Tourism, n.d.; edited by author).

Because of its unique geology and ecology, the Wadden Sea is on the UNESCO World Heritage list (UNESCO, n.d., b). To be on this list, UNESCO (n.d., a) mentions, the site must be of "outstanding universal value". UNESCO (n.d., b) describes the Wadden Sea as the largest unbroken intertidal system of sand and mud flats in the world, one of the last of its kind, where natural processes continue to function largely undisturbed. They consider it as "one of the most important areas for migratory birds in the world", and recognize it as being part of a network of other key sites. To protect the system, UNESCO states, the hydrological and ecological processes have to be maintained. Next to being on the UNESCO list, the Wadden Sea is also an assigned Natura 2000 area, which means that it is part of a European network of protected nature areas in which biodiversity should be

preserved (Natura 2000, n.d., a). The Wadden Sea is the biggest Natura 2000 area of the Netherlands (Natura 2000, n.d., b). Seven organizations that are concerned about the Wadden nature are united in *Coalitie Wadden Natuurlijk* (CWN), and bundle their powers to restore the nature of the Wadden Sea (WaddenZee.nl, n.d., a). The collaborating organisations of CWN are the Waddenvereniging, Vogelbescherming Nederland, Natuurmonumenten, Landschap Noord Holland, It Fryske Gea, Groninger Landschap and Stichting WAD.

The impact of human activity on nature is a fiercely discussed topic in the Wadden area. Currently one of the most discussed topics is the gas extraction from under the Wadden Sea by the NAM (Nederlandse Aardolie Maatschappij). The Waddenvereniging is afraid for soil subsidence due to gas and salt mining activities, as it will lead to the mud flats laying bare less often. This would be a problem: "the millions of birds that rest here and are looking for food will suffer from this", according to Frank Petersen of the Waddenvereniging (EenVandaag, 2020). They (Waddenvereniging, n.d., a) state that this would be a disaster for the nature of the Wadden, which already has to deal with sea level rise due to climate change. NAM (n.d., a) confirms that gas extraction leads to soil subsidence, but says that this is compensated by the natural supply of sediment. In case the sediment supply cannot keep up with the subsidence, NAM says to close the gas tap. Outgoing minister Blok of Economic Affairs and Climate claims not to be able to refuse a new mining permit for the NAM, because looking at the extraction plan "there are currently no signs for irreversible damage to the Wadden area" (NOS, 2021). However, think tank Waddenacademie argued on its turn that there actually are legal grounds to refuse this permit, referring to the regulation that should be applied in Natura2000 areas (Waddenacademie, 2012).

The discussion about gas extraction under the Wadden is only one example of the larger debate around human impact on ecology. Other topics are for instance fishery, commercial shipping, recreation, and salt mining. Through co-existing in the same space, the roles and activities of different actors, the related effects on nature, and even the very meaning of this nature, are contested.

1.2: rights for the Wadden as an answer to current Wadden management

The ministries of I&W (Infrastructure and Waterworks) and LNV (Agriculture, Nature and Food Quality) commissioned consultancy firm AT Osborne to assess the governance of the Wadden Sea. In December 2018 the latter presented their advisory report. They determined that nature quality preservation goals had been fulfilled, but that the quality improvement goals had not. The most prominent causes for this were stated to be rooted in policy decisions: the co-usage of the Wadden Sea for economic gains. Other causes included historical big interventions like the construction of the *Afsluitdijk*, climate change and sea level rise, and causes that are not well understood yet due to the complex dynamics of the system. Of these, the policy cause was said to be the most feasible to tackle. AT Osborne stated that the current governance is inefficient and not working towards the goals. They mention that too many parties are involved, each with different tasks and responsibilities, especially in the case of nature management. Additionally, a coherent perspective on management was said to be lacking. Next to that, AT Osborne found that decision making happens slow or does not establish due to lack of steering and persistence.

Lambooy et al. (2019) critically reflect on the current Wadden Sea management by drawing on the report of the consultancy firm. They argue that of the six alternative ways of management that AT Osborne proposed, the Dutch government has chosen "a rather 'light' version" (Lambooy et al., 2019; p. 790). In this version, the Wadden Sea management authority will have no legal personality, no budget, and no powers of its own. Lambooy et al. doubt whether this version will be effective, as it leaves the current duties and powers of management unaffected. On top of that, they argue, it is

solely focused on management, and not concerned with wider policy making on co-usage and nature protection or improvement of the Wadden Sea. Lambooy et al. expect that this new management version will not lead to long-term improvements, because the ministries of Infrastructure and Waterworks and Agriculture, Nature and Food Quality will continue to put the interests of their stakeholders first, including the gas and salt extractors. To create successful governance, Lambooy et al. propose "that the Wadden Sea be granted its own rights and the ability to act as a legal person with a well-defined purpose stipulated in its articles of incorporation (...), rather than by being managed by two ministries and a management authority" (p. 791). They argue that apparently the interest of nature and next generations are not taken into account in the current governance. Lambooy et al. propose to grant legal personhood to the Wadden Sea in the shape of a 'natureship', which will be elaborated on in chapter 4: background. The idea of granting rights to pieces of nature is not new, and is even applied in among others New Zealand (Kauffman & Martin, 2018), India (O'Donnel, 2018), Equador (Kauffman & Martin, 2018), and very recently, in Spain (Murcia Today, 2022).

1.3: the research

A change in Wadden Sea management means that there will be a change for the people connected to the Wadden Sea. However, the idea of a natureship by Lambooy et al. implicitly adopts a certain idea of what the Wadden Sea is and should be: an ecological system, with the right to flourish and to protect itself. This is one way of regarding the Wadden Sea, but various imaginaries exist. Imaginaries present themselves through how social groups have particular views and aspirations for the socioenvironmental world, and how they wish to order the world in a corresponding way (Boelens et al., 2016). These different imaginaries lead to territorial pluralism, which means that there are overlapping hydrosocial configurations based on different material, social and symbolic values. Chapter 3: theoretical framework, elaborates on these concepts.

It is not clear yet how the actors of the Wadden Sea currently define the Wadden Sea, nor what stance they take in the debate about granting the Wadden Sea legal personality. Using the theoretical lens of *hydrosocial territories*, and focussing on CWN, fishery actors, mining companies, the recreational sector and governmental actors ¹ as actors, this research seeks to find an answer to the question:

"What are the hydrosocial territorial imaginaries of CWN, fishery actors, mining companies, the recreational sector and governmental actors and what stance do they take in the debate about granting the Wadden Sea legal personality?"

The *scientific objective* of this research is to find out what the hydrosocial imaginaries of CWN, fishery actors, mining companies, the recreational sector and governmental actors look like, and what stance they take in the debate about granting the Wadden Sea legal personality. This to contribute to the base of knowledge that is needed to explore the opportunities and pitfalls of granting the Wadden Sea legal personality.

The societal objective of this research is to contribute to the debate about granting the Wadden Sea legal personality, and to open a dialogue among actors of the Wadden Sea with divergent interests in the Wadden Sea.

_

¹ Obviously, there are much more actors concerned with the Wadden Sea. However, a selection had to be made due to the time span of this research. The actors for this research were selected because of their current prominence in the Wadden Sea. They have diverse characteristics, allowing this research to shed light on a broad range of imaginaries of the Wadden.

The following sub questions were established in order to answer the main research question. The answers to these questions are explored per actor group.

- 1. What are the current hydrosocial territorial imaginaries of the actor groups?
- 2. What values lie at the heart of these imaginaries?
- 3. What are the perceived consequences of rights for the Wadden?
- 4. What are notions of justice of rights for the Wadden?

Interviews and literature will be the main source of information to answer the research questions. The results will be theorized using the concept of hydrosocial territories, which includes the concepts of hydrosocial imaginaries territorial pluralism. For the fourth sub question the concept of environmental justice will be used.

Chapters 2, 3, and 4 describe the practical and theoretical backbone of this research: subsequently the methodology, theoretical framework, and background. Chapters 5, 6, and 7 present the results. Chapter 9 discusses these results, and chapter 10 provides the summarized conclusions of this research.

Every chapter has its own front page with image. The images are not specifically connected to the content of the chapter, but are meant to encourage the reader to think about the many faces of the Wadden. Also, the pictures bring some welcome colours to an otherwise rather dull-looking piece of text. The sources of the pictures can be found at the end of the reference list.



Chapter 2: methodology

Chapter 2: methodology

The research process consisted of roughly three phases. The first was the creation of a research plan, the second consisted of conducting interviews and doing literature research, and the third entailed the analysis of the results and the writing of the research report. During the whole research process I was supervised by Jaime Hoogesteger, with whom I had regular contact about my plans and questions. This chapter describes the implementation of the interview phase and the analysis and writing phase.

2.1: interview phase

Semi structured in-depth interviews were carried out to provide for the main source of information for this research. This interview method suits the research questions, as the latter are personal each interviewee. Semi structured interviews create the possibility to anticipate on unexpected topics the interviewee brings up, while still keeping a focus on answering the research questions. Going into depth in the interview conversation creates space to really understand the interviewee's imaginary of the Wadden Sea and their thoughts on hypothetical rights for the Wadden Sea.

An interview guide was made to conduct the interviews well, and can be found in *Annex 1*. Additional questions were asked to go into depth to really understand the views of the interviewees. In case of consent the interviews were recorded, and in all cases written notes were taken. Most interviews took about an hour. The written interview notes were worked out as soon as possible after the interview. The recordings were used to enhance interview notes and to extract quotes from. For all individual interviews the written notes were sent back as an option to double-check. The snowball sampling technique was used to contact new interviewees. The group of interviewed people was checked regularly for diversity to stimulate heterogeneity of interview sources, and new contacts were sought accordingly. Part of the interviews was conducted offline in Leeuwarden, where I stayed for one week. During the process of data gathering I kept track of my personal thoughts and ideas on my research and its results by taking personal notes in a separate document. An overview of the interviewees can be found in annex 2. All interviewees declared that their name could be used in this thesis report.

Important to note is that these interviewees are not solely their current position or the actor group to which they are (currently) connected. Some are inhabitants of the Wadden area, and multiple interviewees were trained as ecologist or biologist. Those characteristics cross the boundaries of the actor groups.

Next to these interviewees there were people that did not reply to my interview requests. They probably did not receive the message, forgot it, or did not want to reply. It concerns two people I wanted to interview for the fishery sector, three organizations for the recreation sector and one for the mining actors.

To get a practical understanding of the Wadden I explored them by touring along the Frisian mainland coast to see the salt marches on the Wadden side and the villages on the mainland side of the dike. I also visited a museum located on the Afsluitdijk, called the Wadden Centre, which teaches about the natural and social history of the Wadden and the activities that currently take place. Lastly I visited the Lauwersmeer on a boat, of which the owner, Geurt, taught me about the sea side of the Wadden. I intended to do a Wad walking tour, but due to the weather and practical difficulties that was not possible. Attending the stakeholder meeting organized by the *Waddenacademie* and the inventors of rights for the Wadden was unfortunately not possible due to my corona infection.

2.2: analysis and writing phase

To categorize the results per research question the interview notes were highlighted with different colours. These parts were then separated and organized to create a structure to write the report. This has been an iterative process. While working out this structure in text, illustrating quotes were extracted from the recordings and added to the text. To be open about my own stance in the debate around this research topic, I occasionally expressed my positionality in the discussion and conclusion chapters.

Chapters 5, 6, 7, and 8 present the results of the research. Chapter 9 endeavours to add a deeper layer to the results by linking it to the theoretical framework. Additionally, it discusses the methodology of this research. Chapter 10 summarizes the research by answering the research questions and presenting the most important findings.



Chapter 3: theoretical framework

Chapter 3: theoretical framework

In order to analyse the results, this research uses a theoretical framework. This chapter elaborates on the theories of hydrosocial territories, hydrosocial imaginaries and territorial pluralism, interests and strategies, stakeholder theory, and environmental justice. Important to note is that the use of concepts means that the issue is viewed through a certain lens: one of the ways to understand reality. The concept of hydrosocial territories, and the related concepts hydrosocial imaginaries, territorial pluralism, interests and strategies, are rooted in a political ecology perspective. Watts (2000) describes political ecology as seeking to understand "the complex relations between nature and society through a careful analysis of what one might call the forms of access and control over resources and their implications for environmental health and sustainable livelihoods" (p. 257).

3.1: hydrosocial territories

Boelens et al. (2016) describe a hydrosocial territory as "the contested imaginary and socioenvironmental materialization of a spatially bound multi-scalar network in which humans, water flows, ecological relations, hydraulic infrastructure, financial means, legal-administrative arrangements and cultural institutions and practices are interactively defined, aligned and mobilized through epistemological belief systems, political hierarchies and naturalizing discourses" (Boelens et al., 2016; p. 2). They argue that water problems are not politically neutral, technical or managerial, but rather deeply political, and that territories are actively constructed through the interfaces of society, technology and nature. Baletti (2012) reflects this idea, by recognizing territory as a substance of society, embodying its conflicts, contradictions and struggles. Boelens et al. (2016) add that the functions, meanings and values of hydrosocial territories are contested, and therefore show processes of development and marginalization, inclusion and exclusion, and unequal distribution of costs and benefits. Swyngedouw (2004) describes how hydrosocial territories are never fixed. They are continually contested and restructured in terms of content, extent, relative importance and interrelations. Ideas about on which scales hydrosocial territories should be organized (e.g. household, community, watershed, region, nation, globe) envision different ways to pattern livelihood practices and economic and socionatural development (Boelens et al., 2016). Therefore the projections on how hydrosocial territories should be organized can lead to empowerment of certain groups while disempowering others, creating an arena for contestation and negotiation. The result is a hydrosocial configuration compromised by political representation, water security issues and property structures (Boelens et al., 2016).

3.2: hydrosocial imaginaries and territorial pluralism

Ideas about how hydrosocial territories should be organized arise from political-economic and socioenvironmental imaginaries (Boelens et al., 2016). Steger and Paul (2013) explain the imaginaries as follows; "Imaginaries are patterned convocations of the social whole. These deep-seated modes of understanding provide largely pre-reflexive parameters within which people imagine their social existence" (p. 13). Differing imaginaries lead to encounters of overlapping political and geographical projects, generating 'territorial pluralism' (Boelens et al., 2016). This means that there are overlapping and interacting hydrosocial configurations in the same space. Their different material, social and symbolic values, and different interlinkages and boundaries, lead to contestation (Boelens et al., 2016). Therefore, Boelens et al. (2016) argue, the local struggles are as much about resources to sustain livelihoods as they are about the discourses that support their claim to self-define water rules, nature values and territorial meanings. The notion that there are different imaginaries around what water is and should be reflects the notion of multiple water ontologies by Yates et al. (2017). They reject the idea of 'one material reality', and argue that ignoring alternative realities can lead to failing governance approaches. Therefore, Yates et al. propose to embrace diverse ways of understanding water, nature and the world.

3.3: interests and strategies

Hydrosocial imaginaries are closely linked to interests and the strategies to realize those interests. In this way, territorial politics express themselves. Boelens et al. (2016) explain that different groups with different interests struggle to define, influence and command governance. Whether the repatterning of the territory takes place in accordance with the interests of a group of stakeholders depends on the support and power of a coalition that provides the scientific, technical and discursive support to this reconfiguration (Swyngedouw, 2015). Ruling groups strategically use discourses that define the social and material world, to leave the political order unchallenged (Foucault, 1980). This process often occurs subtly in everyday life. Opposing groups struggle against this by exercising power, negotiation, and by making strategic alliances, trying to (re)gain control and empowerment (Boelens et al., 2016).

3.4: stakeholder theory and stakeholder analysis

The way this research looks into imaginaries in order to understand the potential effects of the idea of rights for the Wadden is based on stakeholder analysis and stakeholder theory. The stakeholder analysis is used in order to anticipate on the influence of stakeholders on managerial effectiveness. Reed et al. (2009) describe a stakeholder analysis as a tool to generate knowledge about actors with the aim to understand their interests and interrelations. They mention that it can be used for policy analysis, project or policy implementation, or to predict policy development. The outcome of the analysis should reveal and explain whether an actor supports the policy or project (Reed et al., 2009). The stakeholder analysis draws on stakeholder theory, which is based on the notion that stakeholders have an influence on long-term strategic management goals, and therefore play a critical role in deciding the effectiveness of the management strategy (Danso et al., 2020). Stakeholder theory also builds on systems thinking, which argues that organization and management are linked to the broader social system (Rambaree et al., 2021).

3.5: environmental justice

In order to organize and theorize the answers to the fourth sub question the concept of environmental justice will be used. According to Lau et al. (2021) this concept provides a theoretical foundation for research on environmental change and management. Notions of justice arise from hydrosocial imaginaries and the creation of hydrosocial territories, as they are about the configuration of the legal and practical human-nature system.

The founder of environmental justice is Robert Bullard (Dr. Robert Bullard, n.d.). The United States Environmental Protection Agency defines environmental justice as "the fair treatment and meaningful involvement of all people regardless of race, colour, national origin, or income, with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies" (US EPA, 2019). Literature about environmental justice recognizes different forms of justice, but currently the most commonly used categories are distributive justice, procedural justice, recognition justice and ecological justice.

Distributive justice is about the fairness of the allocation of goods, costs and benefits of the environment, including resources (Hess et al., 2021; Williams & Doyon, 2019). It is not only about the direct environmental impact like burden or benefit, but also about vulnerability, responsibility and need (William & Doyon, 2019).

Procedural justice covers the participation in processes of ecosystem governance, and therefore the participation in decision making (Hess et al., 2021; Williams & Doyon, 2019). Procedural and distributive justice are closely linked, as fair participation procedures help to achieve equitable outcomes (Hess et al., 2021).

Recognition justice involves questions about whose identities, views, knowledge and interests are recognized (Lau et al., 2020). It is about acknowledgement and respect for difference between individuals or groups (Hess et al., 2021), and related to prejudice and discrimination, and misrecognition or non-recognition (Williams and Doyon, 2019).

Where the former three types of justice focus on human dimensions, ecological justice focuses on the effect of developments on flora and fauna species and their ecosystems (Hess et al., 2021; Celermajer et al., 2021). Schlossberg (2012) argues human practices should be considered unjust if the basic functioning of the ecological system is harmed by those practices.

Environmental (in)justice takes place across various scales: justice for individuals, communities, non-human species and ecosystems (Schlosberg, 2013). Injustice can take place between people, which is called horizontal injustice, but can also take place between humans and non-human species: vertical injustice (Williams & Doyon, 2019). Recognizing and understanding culture and context are critical for implementing management measures (Holland, 2017), as perceived injustice is often a cause for conflict (Gurney et al., 2014).



Chapter 4: background

Chapter 4: background

To get a better understanding of Wadden Sea management and the proposed changes by Lambooy et al. (2019), this chapter elaborates on subsequently current Wadden Sea governance, the concept of rights of nature, the practice of rights of nature, and the natureship as proposed by Lambooy et al. (2019).

4.1: current Wadden Sea governance

In 2019 the governance system of the Wadden Sea was revised to make it less complex and more effective (Beheerautoriteit Waddenzee, n.d.). The new system should rise to the challenges of creating a vibrant ecosystem and a sustainable human use of the Wadden area. The core of the new governance is the *Beheerautoriteit Waddenzee* (management authority Wadden Sea). On their website, the management authority explains how this current governance is constructed (Beheerautoriteit, n.d.):

The Agenda voor het Waddengebied 2050 serves as a basis for the new governance. The agenda is created and determined by the Bestuurlijk Overleg Wadden (BOW, Board Consultation Wadden). The BOW is led by the ministry of I&W, and the ministry of LNV, provinces, municipalities, and water authorities are represented (Beheerautoriteit, n.d.). Next to the BOW there is the Omgevingsberaad Waddengebied (environmental consultation Wadden area), which advises the BOW, requested and unrequested. The omgevingsberaad consists of an independent chair, and representatives of nature organizations, sea harbours, fishery, agriculture, recreation and tourism, science, ministry of I&W, ministry of LNV, provinces, municipalities and water authorities (WaddenZee.nl, n.d., b). Third, there is the management authority of the Wadden Sea. Their work is commissioned by the ministries of LNV and I&W, and provinces North-Holland, Friesland and Groningen. Next to that, they closely work together with Beheerderscollectief Waddenzee, the latter existing out of different managerial organizations of the Wadden Sea (Beheerautoriteit, n.d.).

Together, the BOW, *omgevingsberaad* and the management authority aim to create a safe, vibrant, and resilient (veilig, vital, veerkrachtig) Wadden area, in order to prepare for the effects of climate change and to keep the area livable and to have a thriving sustainable economy, according to the management authority (Beheerautoriteit Waddenzee, n.d.).

When planning to carry out activities in the Wadden Sea area that can possibly cause harm to nature and landscape, one needs a permit. The general regulation for spatial planning can be found in the besluit algemene regels ruimtelijke ordening, which is based on the better known PKB Waddenzee (planning decisions Wadden Sea) (overheid.nl, n.d.). The law for nature protection (Wet natuurbescherming) includes all laws around protection of nature areas and species (Rijkswaterstaat, n.d., a). This law incorporates the European bird- and species directive, and aims to protect Natura2000 areas (Rijksoverheid, n.d., a). The whole Wadden Sea is Natura2000 area, with exception of inhabited places on the Wadden islands, and the mainland within the dike (Natura2000, n.d., c). To carry out activities in the Wadden Sea, one often needs multiple permits (WaddenZee.nl, n.d., d).

4.2: Rights of Nature

An increasing number of legislation worldwide recognizes rights of nature to protect and preserve it (Pecharroman, 2018). Christopher Stone was the first scholar that proposed to grant rights to nature, which he did in his essay "Should Trees Have Standing?" published in 1972 (Pecharroman, 2018; Lambooy et al., 2019). Borràs (2016) mentions that the recognition of rights of nature is a new approach in the field of environmental law, of which the goal is to recognize that it is important to protect nature, but not under the cover of protecting human interests. She states that legal systems

have traditionally considered nature as 'property', with the consequence that environmental laws and regulation have developed to legalize and legitimate of environmental harm, despite their goal to prevent from this. Pecharroman (2018) states that existing environmental laws are based on an anthropocentric paradigm, which has turned out to be erroneous: humans are still irreversibly damaging the environment. Therefore, she argues, the recognition of rights of nature requires a paradigm shift from anthropocentric towards earth-centred. Borràs (2016) describes this as the recognition that "humans, as but one part of life on earth, must live within their ecological limits rather than see themselves as the purpose of environmental protection" (p. 114).

Pecharroman (2016) explains that holding legal personhood means that a person or an object holds a set of rights and duties. She points out the distinction between holding legal personhood and having "locus standi": a legal person is granted rights and duties through law, and if it is able to exercise these rights and laws in court it has locus standi. However, Perrachoman continues, not every legal person is able to exercise rights and duties on its own as it can be incapable both physically or legally: for example companies or children. In those cases, the complete exercise of rights can be done by a legal representative (Pecharroman, 2016). Perrachoman mentions that this counters the apparent argument that nature would not be able to stand in court because it cannot speak for itself, and that it also debunks the idea that there is a link between legal personhood and the ability to bear duties, as (small) children have the right to be represented in court while not bearing any responsibility.

4.3: rights of nature in practice

Around the world multiple countries have recognized nature as a subject (Kauffman & Martin, 2018). However, there are differences in the ways countries construct the legal arrangement around granting rights to nature. To give some examples of legal arrangements that brought rights of nature in practice, the following part elaborates on rights of nature in Equador, New Zealand, and India.

Kauffman & Martin (2018) write that in the 1990s Ecuadorian citizens sued Texaco for oil pollution in the Amazon. Indigenous communities argued that nature is sacred and possesses rights, and that it is part of a community in which people take part. The country's constitution was rewritten in 2007, when Rafael Correa got to power after a time of political and economic instability (Kauffman & Martin, 2018). Correa incorporated people in his cabinet that were also a member of the anti-oil extraction community. They influenced the making of the constitution, which now includes an indigenous concept that recognises people to be part of nature, and nature to be vital for human existence. However, Valladares and Boelens (2019) point out that the entitlement of rights to nature took place at the same time that the Ecuadorian government began promoting mining as essential for Ecuador's future. They argue that the government used its power to make mining seem compatible with rights for nature to the public eye, neutralizing and distorting political opposition to mining.

After long-standing disputes between the Maori and the Crown's government, New Zealand formally implemented acts which recognized the Whanganui river and the Te Urewera forest as persons with rights in respectively 2017 and 2014 (Kauffman & Martin, 2018). Kauffman & Martin (2018) write that the Maori traditionally do not recognize nature as something that can be property, but rather as something that requires guardianship, as it is perceived to be a duty to care for their ancestor. Negotiations eventually led to an arrangement in which the Crown did not have to transfer legal ownership to the Maori, and the Maori could say that the Crown did not own the forest and the river.

In 2017 India granted legal personhood to rivers, glaciers, and other natural objects in the state Uttarakhand, as mentioned by O'Donnel (2018). The court justified this by drawing on the power of

the state to intervene on behalf of someone in need of protection, and the duty of the state to protect the environment (O'Donnel, 2018). In addition to that the court recognised the rivers as sacred, drawing on Hindu religion. Therefore a point of critique on this arrangement is that this law elevates Hindu beliefs (O'Donnel, 2018).

As becomes clear from these examples, rights of nature has a political side. Knauß (2018) states that here is a strategic dimension to promoting rights for nature as a mutual interest of indigenous and non-indigenous peoples, in case of dispute between these groups. He seems to be optimistic about the idea of rights of nature, arguing that it makes the value of nature explicit and unquestionable. However, Valladares and Boelens (2019) painted a less bright picture of rights of nature, arguing that in Ecuador it was used as a tool to silence people opposing harmful mining activity.

4.4: natureship

The Wadden Sea is a place where a lot of actors, each with their own interests, come together. The consultancy report of AT Osborne (2018) elaborates on the management of the Wadden Sea and states that current management is inefficient. As a response, Lambooy et al. (2019) propose a solution: granting the Wadden Sea legal personality. They propose to realize this with a 'natureship' (Lambooy et al., 2019). A natureship would be similar to a water authority, or as Lambooy et al. rather translate it for etymological reasons: 'watership' (in Dutch: waterschap). Lambooy et al. explain how Dutch waterships are legally organized: waterships are recognized as public law legal persons. This means that the watership is legally capable to own property, to enter contracts, to file lawsuits, to hire employees and to appoint legal representatives (Lambooy et al., 2019). The watership has certain functions, like protecting from flooding, preserving a suitable groundwater level, and maintaining water quality. Waterships are represented and governed by human beings, whom are elected by landowners, inhabitants and land users. Therefore the watership's governance reflects their differing priorities, which enables it to deal with politically sensitive issues. Waterships have independent powers which they can use to grant permits and levy taxes. Next to these powers, the watership also has the responsibility to make agreements about operating with other public institutions. Lambooy et al. argue that by designing a natureship just like a watership, it would fit perfectly into Dutch law.

According to Lambooy et al. the statutory purpose of the natureship for the Wadden Sea should be to support and protect its ecological integrity and to regulate the human activity so that it does not jeopardize this integrity. Instead of adding another political layer in the already complex management system of the Wadden Sea, a natureship would introduce a new actor that represents the interests of the Wadden Sea and decides about its future. Lambooy et al. explain about practicalities like funding, which should mainly come from Dutch government. In addition to that, the natureship could tax the users of the Wadden Sea and charge fees for the granting of licenses. Lastly, it could claim damages for harms that the Wadden Sea suffered, through for example pollution. However, Lambooy et al. mention that it is key to create a sound balance between the ministries powers and the natureship's independence, to ensure that policy making by the natureship is solely in the interest of the natureship itself instead of being influenced by wider policy concerns of the ministry.



Chapter 5: hydrosocial imaginaries of the Wadden

Chapter 5: hydrosocial imaginaries of the Wadden

This chapter elaborates on the hydrosocial territorial imaginaries of the analysed actor groups. Partly, one's imaginary of what the Wadden depends on one's understanding of nature. All interviewees agree that nature should be treated well, but they have divergent ideas about what the Wadden are and how they should be dealt with. For another important part, imaginaries exist of how people imagine their social role and existence within the environment they live and work in. The following subchapters discuss the characteristics of the actor groups and the existing imaginaries as found in this research. The chapter shows that people relate to the Wadden in divergent ways and that many imaginaries exist, even within actor groups.

5.1: Coalitie Wadden Natuurlijk (CWN)

Coalitie Wadden Natuurlijk is a collaboration between the Waddenvereniging, Vogelbescherming Nederland, Natuurmonumenten, Landschap Noord Holland, It Fryske Gea, Groninger Landschap and Stichting WAD. They have shared general missions, which are a better management of the Wadden Sea, a transition towards sustainable fishery, and restoration of marine life and an integrated coastal development (WaddenZee.nl, n.d., a). CWN works together with other actors of the Wadden and stands up for the nature of the Wadden via the *Omgevingsberaad Waddengebied* and the *Agenda voor het Waddengebied 2050* (WaddenZee.nl, n.d., a). They have a member in the Wadden Sea Board of the Trilateral Wadden Sea Cooperation, which is a cooperation between Denmark, Germany and The Netherlands set up in 1978 to protect the ecology of the Wadden Sea (Wadden Sea World Heritage, n.d., d). Even though these organizations are united in CWN, the motives for their missions are slightly different.

The Waddenvereniging (n.d., b) describes their official goal as follows: "the association strives for preservation, restoration and right management of nature, landscape, environment, ecological, and cultural-historical values of the Wadden area (...). The association also aims to increase the attention for these areas. In her actions, she assumes that people are part of the ecosystem". For it funds the Waddenvereniging depends on its members and on partners. One of those partners is the Nationale Postcode Loterij, which donates 500.000 euro to the Waddenvereniging yearly (n.d., c). Vogelbescherming (n.d.) mentions on their website that their mission is to protect all wild birds and their habitats. They are a national organization supported by members, companies and institutions (same source). Landschap Noord Holland, It Fryske Gea and Groninger Landschap are organisations of respectively the three Wadden provinces Noord Holland, Friesland and Groningen, and are concerned with protection and preservation of nature, landscapes and cultural-historical heritage (Landschap Noord-Holland, n.d.; It Fryske Gea, n.d.; Het Groninger Landschap, n.d.). Natuurmonumenten is a national association which protects nature areas, landscapes and cultural heritage (Natuurmonumenten, n.d.). Stichting WAD is a much smaller organization compared to the other organizations, and does not have a website. Chairman Lenze Hofstee tells that the organization was created in 2005, and that it campaigns for good management of sea nature (personal communication, December 6, 2021).

The goals and missions of the organizations of CWN translate a human understanding of how to go around with nature, and therefore they cannot simply be interpreted as nature's interests. Next to preservation of nature, multiple organizations are concerned with cultural and historical aspects. Landscape is connected to both natural and cultural values, because landscape is shaped by both nature and people.

The people I interviewed for this actor group were Wouter van der Heij, Gerrit Dommerholt, Geertjan Smits, Chris Bakker and Lenze Hofstee, working for respectively the Waddenvereniging, Vogelbescherming, Natuurmonumenten, It Fryske Gea and Stichting WAD.

A shared understanding of this group of interviewees is that there is a lot of human activity on and around the Wadden, which often jeopardizes the flourishing of natural processes. They also think that people cannot and should not be disconnected from nature. Therefore, according to the interviewees, there will always be negotiation between people standing up for nature and people carrying out other activities around the Wadden.

Currently the use of resources from the Wadden is prioritized over the ecological value of the Wadden, according to the interviewees. Political unwillingness and wrong morality were mentioned to be causes for this. The *Beheerautoriteit Wadden* was called a "toothless tiger" and a "stillborn child" because of its lack of budget and power, which was mentioned to be a result of political decisions. One of the interviewees points out that it sometimes seems like the existence of nature has to be justified in terms of usefulness for people, and that it seems to be a last resort measure to give space to nature. Lenze thinks that even though the Wadden Sea has labels like UNESCO World Heritage Site or Natura2000 area, it is still a bare sandpit or a sea desert:

"The whole area is rearranged as a shrimp propagator (...) and in a bare sandpit nothing can attach to something, nothing can hide: all fish is gone. (...) Above the water surface it looks like a lot, this Wadden Sea, with all the birds, plants and insects, but under water it is nothing.""

The interviewees generally agreed that it would be best to reduce human intervention in the ecosystem to a minimum. But when species or processes are in danger due to human activity, it is better to intervene temporarily to maintain or restore that specie or process. The consideration of when to intervene and what to do exactly is often a personal choice, and therefore varies among the interviewees of this actor group. Even though it was mentioned that the Wadden are the least planned nature area of the Netherlands, some interviewees see the Wadden as some kind of garden or park, because of all the human planning it is subject to. But despite this human planning of nature, they still all see the enormous ecological value of the Wadden. Geertjan described the Wadden in the following way:

"[the Wadden Sea is] maybe the most important nature area of the Netherlands, I say that because you could say that it is one of the areas that is least influenced by people. Also there are influences, of course, think of all activities that take place there, take the Afsluitdijk and everything, but still, the guiding principle for that area is to leave it be. Processes should be allowed to be disturbed as least as possible: that is the policy, and that is what everybody works towards. That gives a certain uniqueness, that I think is very special."

Gerrit reflected on nature management practices and said:

"We're still working on recovery and that is what we call it, because so often we hear that what we do is 'gardening', with nesting site this, high tide refuge that... But actually, since the creation of the Afsluitdijk the whole system is severely disturbed. That natural Wadden Sea with the room it needs to store its water during high tide... Since the creation of dikes (...) it is not in a shape anymore that coastal birds can use that in a natural way. """

The interviewees share the opinion that on and around the Wadden human activity should be possible, but in a more sustainable way. One of the interviewee proposes to let ferries navigate

according to the tides, so that less dredging is required. Now dredging clouds the water, which makes it harder for flora to grow and for fauna to forage. Underlying this idea is the understanding that people should adapt to natural processes, and that we should shape our human structures accordingly.

Another interviewee thinks that gas extraction should be put on hold until it is proven that it explicitly does not harm nature, instead of continuing the practice until harm visibly manifests. Behind this statement also hides distrust towards NAM: one of the interviewees believes research by their own order is biased in favour of the interests of the NAM. Research that is regarded as real independent scientific research is mentioned to be the scientific research of for example NIOZ (Koninklijk Nederlands Instituut voor Onderzoek der Zee; Royal Netherlands Institute for Sea Research) and the RUG (Rijksuniversiteit Groningen).

Next to the understanding that people cause harm to nature, also through recreation, the interviewees adopt the understanding that human appreciation of nature is important or even essential for the Wadden to survive: for as people are barred from entering and enjoying the Wadden, they will most likely lose their appreciation and interest in the area, leading to a decline in support for Wadden nature conservation and restoration. And also, because the interviewees all love nature, they want to be able to enjoy it, and they are aware of how many other people love nature and love the Wadden. However, not all people that love the Wadden treat it well, which is often understood to be out of ignorance. Therefore a strategy of the CWN organizations is to maintain and enhance the ecological quality of the Wadden by education and communication. The shared understanding is that if people love the Wadden, they will be willing to learn to go around with it in the right way.

To conclude, all members of CWN advocate for their image of what nature should be. Their arguments are rooted in an understanding that human activity harms the nature of the Wadden. From the short introduction of the CWN members it became clear that most these organizations are concerned with culture and heritage, next to nature. There is a general understanding that the negative human influence on nature can be solved through education, communication, and persuasion.

5.2: fishery actors

Commercial fishers in the Wadden Sea and the North Sea coastal zone (up to 7 km north of the Wadden islands) fish mainly on shrimp (Rijk-regio projectgroep, 2020). In May 2021, there were 89 permits for shrimp fishing in circulation in the Wadden Sea (Visserij.nl, 2021). Other fishery catch from the Wadden Sea are mussels, oysters, cockles, European bass and mullet (Fish & Farm, 2018; Rijk-regio projectgroep, 2020). Fishing techniques depend on the type of catch. Fishing techniques that touch the seafloor generally cause turbidity and seafloor damage, while fishing techniques that do not touch the seafloor has bycatch as potential problem (WaddenZee.nl, n.d., e).

Most of the commercial fishing companies have joined the *Coöperatieve Visserij Organisatie* (CVO) (Fish & Farm, 2018). Fishing companies have to live up to multiple policy arrangements and programs in order to protect the ecology of the Wadden Sea, under which *Programma naar een Rijke Waddenzee*, VISWAD and VIBEG (Fish & Farm, 2018). VISWAD and VIBEG are policy agreements between the fishery sector, government and nature organizations, and are designed to realize a more ecologically sustainable Wadden Sea. VISWAD includes fishing fleet reduction by buying out permits: between 2014 and 2020, the fishery fleet should have been reduced by 20-30%, while preserving an attractive socio-economic perspective for the remaining fishers (Fish & Farm, 2018). VIBEG includes the phased closure of areas of the Wadden Sea. The *Agenda voor het Waddengebied*

2050 mentions that the most important issue regarding fishery is to make it financially profitable while not obstructing the natural processes in the Wadden Sea and the North Sea coastal zone (Rijkregio projectgroep, 2020). To do this, they mention, the innovation power of the fishery sector should be enhanced: the fishery sector should take responsibility for the initiation of pilots for innovative fishing techniques, focused on diminishing the impact of fishery on the natural system. In case those pilots are successful, there should be looked into the possibilities for implementation. *Programma naar een Rijke Waddenzee* has the aim to create a resilient Wadden Sea while transitioning to sustainable human use (Programma naar een Rijke Waddenzee, n.d.), and is connected to fishery activities though the topics 'food web' and 'sustainable transition of harbours' (Fish & Farm, 2018).

To get an idea of the hydrosocial imaginary of the fishery sector, I interviewed Johan Bakker, who used to catch shrimp from the Wadden Sea for seventeen years, and a representative of a fishery association (hereafter referred to as 'fishery representative').

A common understanding in this sector is that fishery seems to be driven into a corner. Even though fishers are open to adopt more sustainable practices, they do not get the chance to do so financially, according to Johan. The fishery representative explains that with permits for only three or five years, the fisher will not make an investment in for example a more sustainable ship, as this will only be repaid in 20 or 30 years. In the current situation, a fisher would not and cannot risk such an uncertainty in income. This does not mean however, that people in the fishery sector are unwilling to be sustainable. In fact, some sustainable transitions like different types of nets came from fishers themselves, Johan remarks. Fishers would also be willing to make investments, provided that they can rely on a long term plan that matches the long term investment, though currently the fishery sector is not provided with such certainty.

Fishers are usually at sea for multiple days in a row, and therefore see a lot of what is happening at sea. Johan mentions a spot at the IJsselmeer side of the Afsluitdijk, where the swans left since the placement of the windmills. Something else that irritates people in the fishery sector that regulations and laws seem to make no sense. Johan mentions how fishers are obligated to throw back a type of fish of which he knows it will not survive after being caught, and he knows that other types of fish have a much bigger chance of survival, but that not have to be thrown back. In the same line of thought, the fishery representative adds how they are in favour of fish migration systems, but not like the one that is currently realized in the *Afsluitdijk*, which they think is expensive without necessarily being more effective than other, cheaper options. They see that in this system, fish are vulnerable to being caught by predators, as bird colonies are stimulated to settle through the design of the migration river. These kinds of discrepancies leave the fishery representative wondering whether nature conservation is aimed at obtaining goals in an effective manner, or whether it is a hobby with an economy of its own. Even if this is the case, they say, that is all right, but do not call it nature conservation, call it gardening:

"We work on improving nature by adding a structures to an area of which it is the very characteristic that it does not have these structures. I mean, now we have windfarms in the North Sea, which is primarily a sandy seabed. We're adding all kinds of artificial hard surfaces and structures to increase biodiversity; we facilitate hiding places for fish by dumping rocks and artificial reefs; we accommodate species that thrive on hard structures and then we call that nature improvement... But the very idea that the North Sea has a vast amount of hard structures that something can stick to?! That is not nature, that is gardening. And that is fine, but call it gardening. Because then at least it changes the societal perception to a more realistic and honest image of nature protection^{iv}"

Next to different views on nature management, there are different views on human activities in the Wadden Sea. Johan wonders why the fisher has to leave, regarding all other human activity in and around the Wadden. He wonders whether the fishery sector is not much more crucial than for example recreation. After all, Johan says, fish is a healthy food product and that the fish has led a natural life. The fishery representative is worried about the consequences of driving out the fishery sector in the north of the Netherlands, because many people depend on jobs in for example the fish markets and fish processing. To the fishery representative it almost seems like nature conservation is prioritized over these people, which they think is wrong.

In the fishery sector there appears to be a common understanding that the fisher holds a lot of knowledge about the sea and about fish. For the fisher it is frustrating that this knowledge is sometimes not in line with regulation. People in the fishery sector are often critical towards the current ways of nature management, as some nature protection or development measures make no sense in their opinion. For fishers and others working in the fishery sector a lot is at stake, as their livelihood depends on it. Also, because of the nature of their profession, fishers have to make big investments for their ship and equipment. However, people in the fishery sector see that current regulation changes too fast to be able to make investments. Because of this, the fisher does not see many possibilities to change towards more sustainable practices, leaving them feeling to be driven into a corner.

5.3: mining companies

From underneath the Wadden Sea gas is extracted by the NAM and salt by Frisia. Their plants are situated on the mainland, from which an angled pipeline runs to the extraction locations. Both salt and gas extraction lead to soil subsidence, but its perceived impact on nature is highly contested. In order to mine, a company needs certain permits provided by the ministry of EZK. The *Staatstoezicht op de Mijnen* (SodM; governmental supervision over the mines) advises this ministry about the (environmental) safety aspects of these permits (SodM, n.d.). Next to that, SodM supervises and checks whether mining companies stick to regulation. This subchapter elaborates about the hydrosocial imaginaries of NAM and Frisia. Figure 2 (next page) shows where extraction activities take place: the single bigger left asterisk (*) marks the salt mining location, the five smaller asterisks mark the locations from which NAM extracts gas from the fields under the Wadden Sea (areas coloured green).

NAM

NAM extracts gas from under the Wadden Sea, and is owned by shareholders Shell and ExxonMobil (NOS, 2022). Since the 1980's NAM mines gas from near Ameland and Blija and since 2006 also from Moddergat, Lauwersoog and Vierhuizen (NAM, n.d., a; smaller asterisks in figure 2). Their plants are situated on the mainland, from where a pipeline runs to the gas field under the Wadden Sea. The company does not place production platforms in the Wadden Sea, because it is a UNESCO World Heritage site. NAM (n.d., a) mentions that the Wadden area is part of the small gas fields area, and emphasizes the importance of these small gas fields for the Dutch energy provision. NOS (2016) mentions that around 30% of Dutch gas comes from these small fields.



Figure 2 Map of gas- and salt mining locations (NAM, n.d., b; edited by author)

Gas extraction leads to subsidence of the deep soil (NAM, n.d., a), but NAM says that this is compensated on the surface by the natural supply of sediment in the Wadden Sea. The soil subsidence is monitored by the NAM itself and by external researchers and commissions (NAM, n.d., a). NAM works with the 'hand on tap' principle, which means that if the soil subsides faster than the natural sediment suppletion, the amount of extraction will be decreased accordingly (NAM, n.d., a). Every year the ministry of Economics and Climate and the ministry of Agriculture, Nature and Food quality asks the independent scientific *Auditcommissie Gaswinning Waddenzee* (audit commission gas extraction Wadden Sea) for advice about NAM's reports (NAM, n.d., a). The latest advice concluded that the soil subsidence in 2019 stayed within the approved limits, and that there are no indications for changes of the nature of the Wadden Sea and Lauwersmeer that could be the result of gas extraction (mer, 2020). The approved limits are determined per tidal basin² every five years, based on natural sediment supply and relative sea level rise (Wiebes, 2020).

Lately gas extraction under the Wadden Sea has been topic of discussion in the media because outgoing minister Blok of Economic Affairs and Climate claimed to not be able to refuse a new mining permit for the NAM, because looking at the extraction plan "there are currently no signs for irreversible damage to the Wadden area" (NOS, 2021). The Waddenacademie, however, argued that the permit can and should be legally refused, because there would be no reliable scientific predictions for its influence on nature, thereby referring to the legal precautionary principle³ that should be applied for Natura2000 areas (Waddenacademie, 2021). Also the International Union for Conservation of Nature (IUCN) called for withdrawal of this permit, referring to the outstanding

² A tidal basin or *komberging* is the area where water is stored during high tide. In the Wadden Sea its border lies more or less on the shallowest line between de deeper channels that lead through the openings between the Wadden islands to the North Sea.

³ Precautionary principle: Askins et al. (2019) define the environmental precautionary principle (EPP) as follows: "According to this principle, the responsibility towards future generations commands that the natural foundations of life are preserved and that irreversible types of damages must be avoided. In essence, the EPP requires that preventative action must be taken to avoid irreversible changes with unforeseeable consequences, prior to conclusive scientific evidence of danger." (p. 12)

universal value of the UNESCO World Herigate status, and noting that the precautionary principle should be leading in both European and national legislation (IUCN, 2021).

Frisia

Frisia Zout B.V. is situated in Harlingen and produces salt for the food and chemical industries and (Frisia Zout B.V., n.d., a). It is a subsidiary company of esco (Frisia Zout B.V., n.d., b), which is on its turn a subsidiary of K+S (K+S, 2019). In 2020 the company started to extract salt from under the Wadden Sea, after having extracted salt from under the mainland (Frisia Zout B.V., 2020). In 2011 the province of Friesland, municipalities and the water authority decided together with Frisia to finish all salt mining under the mainland and to move the extraction to the Wadden Sea, at the latest 2021, as long as no negative influence on nature manifests (Rijk-regio projectgroep, 2020). The company mentions that salt mining under the Wadden Sea leads to subsidence of the deep soil, but that this is compensated by supply of sediment on the surface (Frisia Zout B.V., n.d., c). However, as mentioned in the *Agenda 2050* (Rijk-regio projectgroep, 2020) no new salt extraction permits should be granted outside the existing location, in order to maintain the open character of the landscape. Just like the NAM, Frisia works with the hand on tap principle. For advice about environmental matters Frisia hires external consultancy firms (Jeroen Jansen, personal communication, October 29, 2021).

Debate on soil subsidence

Bing Wang et al. (2018) mention that the approved limits for soil subsidence have been subject to discussion since the introduction of the hand on tap principle. They also mention that the Wadden Sea currently seems to be able to import enough sediment to exceed the rate of relative sea level rise, but that future sediment availability will be constraining. This has to do with the availability of sediment in de so-called ebb-tidal delta's at the North Sea sides of the Wadden islands (Bing Wang et al., 2018). Therefore, they argue, coastal nourishment will become a more prominent human intervention in de Wadden Sea area. As mentioned in the introduction, Frank Petersen of the Waddenvereniging argues that soil subsidence leads to a change in sediment composition, which is likely to change current flora and fauna (EenVandaag, 2020). The Waddenvereniging (2017) argues that the available knowledge on soil subsidence does not provide enough information for reliable predictions, and demands governmental intervention. They believe that gas extraction from under the Wadden is not safe under current conditions. A research commissioned by the Waddenvereniging (Schuttenhelm, 2017) argues that the available sediment supply to the Wadden Sea should be seen partly as a one-time buffer, and that implications for avoidable subsidence are big as it consumes a share of this one-time buffer. Next to that, the research states that soil subsidence by mining is unpredictable, and that existing mining permits are not based on a sound scientific basis. The latter is said to be based on unreliable input data, underestimating the speed of sea level rise, not taking into account high-risk scenario's, and focusing too much on the short term. Lastly, Schuttenhelm (2017) argues that the 'hand on tap' principle is an unsuitable mechanism to prevent from damage by mining, as it does not prevent from lagging effects. However, mer (2021) states the opposite, calling it a right and timely intervention for when predictions turn out wrong. Schuttenhelm (2017) thinks that there is lack of academic research, and that instead the case is that parties with direct interests fall back on consultancy research commissioned by themselves. All in all, as Schuttenhelm argues, mining causes avoidable ecological damage and a threat to coastal protection.

Jeroen, Health Systems Quality Environment manager at Frisia and educated as marine biologist, argues that some researchers use their position to bring their personal activistic point of view into the societal discourse. Jeroen blames certain scientific institutes in the Netherlands for making

unnuanced statements about concepts that are not a universal truth. Because researchers and research institutes have a trusted and respected position in society, this leads to a major influence on society, which becomes distorted and biased, according to Jeroen. In this way, Jeroen argues, the *Waddenvereniging* attracts the sympathy of many parties, while the influence of the mining sector on the discourse remains limited. This for example manifests in the dominant focus on mining activity as harmful to the Wadden. Jeroen thinks that the big negative focus on salt extraction in this discourse is unjustified, because Frisia is a relatively small company making use of a relatively small area.

To summarize, in this chapter it became clear that NAM and Frisia state that the effect of mining on nature is not disconcerting. However, a significant group of people does not trust the companies and their research, and point out research with other outcomes. They fear that irreversible damage will not be avoided, because it will only be acknowledged when it manifests: something which mining companies debunk. The NAM seems to have part of the Dutch government on its side, as the outgoing minister Blok said to not be able to refuse a new extraction permit. All in all, currently the activities of the mining sector appear to be one of the most contested in the debate around the nature of the Wadden.

5.4: recreation sector

The Wadden islands are among the richest municipalities in the north of the Netherlands, for which tourism makes out 80% of their total income (Schroor, 2018), making tourism and recreation the most important economic sectors for the Wadden islands (rijk-regio projectgroep, 2020). In 2016, the Wadden islands received 1.332.000 tourists, with a total of 5.408.000 overnight stays (CBS, 2017). The mainland, however, is much less popular among tourists: for years more tourists are tried to be attracted with initiatives like *Holwerd aan Zee* or *Sense of Place* (Schroor, 2018).

The Agenda voor het Waddengebied 2050 (rijk-regio projectgroep, 2020) mentions that recreation and tourism contribute to the societal support of nature protection. The strategy for recreation as mentioned in the Agenda is to aim for quality and not for quantity, in order to disturb nature less while keeping up the economic profitability. The status of UNESCO World Heritage Site is an opportunity to make the Wadden more well-known nationally and internationally, the *rijk-regio projectgroep* mentions. To provide space for new touristic facilitations, the tourism at the edges of the Wadden Sea should be enhanced. Therefore the mainland should offer more touristic facilities like attractions and infrastructure.

Sijtsma et al. (2015) elaborate on the types of recreational traffic on the Wadden Sea. They mention that much of the recreational sailing takes place on sailing boats, but there is a trend towards more larger and luxurious yachts. The latter mainly navigate through the large fairways in the Western part of the Wadden Sea. Next to that, there are the shallower boats that often sail through the east-west route, which is ecologically more vulnerable (Sijtsma et al., 2015). These boats may anchor and 'fall dry' (laying on the mud flats) with low tide. Another type of recreational sailing is with the charter fleet, which carries tourist groups. Lastly, Sijtsma et al. mention the ferries that bring tourists and inhabitants to and from the islands. The ferry to Texel takes approximately 10 minutes, while the ferries to Vlieland and Terschelling take 90 minutes. To keep the fairway to Ameland accessible for ferries, 3.5 million euros is spent yearly on dredging (Rijkswaterstaat, n.d., b). The size of the recreational boating activity remained constant for the last ten years, while the touristic commercial shipping sector, entailing water taxis, RIB-boats and boats used for seal watching excursions, is growing (rijk-regio projectgroep, 2020).

Next to sailing, recreational fishing takes place in the Wadden Sea. Recreational fishing done with fishing poles does not damage the seafloor and does not have bycatch, but does extract amounts of fish species from the ecosystem (WaddenZee.nl, n.d., c). However, the extent of this catch and its effect on the ecosystem are unclear. Other popular recreational activities in the Wadden Sea are walking on the mudflats (*wadlopen*), seal watching excursions (Heslinga et al., 2019), and demonstrational tours on fishing ships.

To get an idea of the hydrosocial imaginary of the recreational sector, I interviewed Robbert van der Eijk, who is the secretary of the Wadvaarders, which is closely connected to the national *Watersportverbond* (water sports alliance), and Melle ten Kate, who is a Wadden guide at association Vrije Wadlopers.

When Melle walks in the middle of the Wadden with a bunch of tourists, he sees that people love the stillness and become more quiet themselves as well. He also knows that the Wadden are a crucial spot for migrating birds and fish. Robbert mentions that visitors of the Wadden want to preserve the Wadden, otherwise there would be no reason to come to the area in the first place. In that way, people are needed to maintain the nature of the Wadden. Visitors of the Wadden do not always know how to go around without harming its nature, and therefore, Melle says, it is important to educate about the Wadden. Visitors should rather be convinced than be forced to treat nature in a better way. Melle thinks that some people might then vote for a political party that works to maintain the Wadden:

"If you stand in the middle of the Wadden Sea, on a mudflat, and you see nothing but the Wadden, people tend to become really calm. They find it wonderful: you see the horizon, you see the sun glitter in the water, and so on... These are the moments that you can point out that it is still existing now, but that it can disappear due to our human activities. (...) So when they enjoyed this and come back home, and it is time to vote for the house of representatives, politics and all, there is a chance that they say 'we shouldn't go this far, that little amount of gas that is still underground...', then we should find another way to facilitate the energy transition.""

If we do not care for nature it will eventually survive in a new shape without us humans, Melle thinks. But he would love it if the children of his grandchildren can still experience the Wadden like he does today. He recognizes dredging as the biggest threat for the Wadden area. If people would only learn to live according to the dynamics of nature like the tides, much less dredging would be needed.

Melle and Robbert are both critical about the national government. They both mention how economy is often prioritized over nature, and Robbert adds that often people in the house of representatives do not know much about the Wadden. Robbert explains about the *kombergingsbijeenkomsten*, which are meetings for every tidal basin of the Wadden. Groups that participate are *Staatsbosbeheer*, *Rijkswaterstaat*, CWN, fishers, owners of salt marsh land, municipalities and scientists. Scientists usually come by invitation. NAM does not participate in the meetings, although they are allowed to join as well, according to Robbert. In these meetings Robbert feels an ambiance of consultation and a feeling of a shared responsibility. According to him this is different than it used to be: he experienced that in the past people were much more opposed to each other and started lawsuits more quickly. Robbert prefers this new shape of communication. Therefore, the *kombergingsbijeenkomsten* work well according to Robbert. He said that it appeared that the participants of the meeting were able to find a solution together, but that the Dutch government was constraining the newfound solutions, for example by not providing sufficient funds.

He mentions that decentralization of the government made that responsibilities of the ministries were transferred to municipalities and regions. But with this transition, no money went to the municipalities and regions. This critique on decentralization is was also mentioned by multiple governmental actors, and is also mentioned in the next subchapter.

To conclude, the recreation sector of the Wadden is broad in both activities and characteristics. By the Agenda 2050 the recreation and tourism sector is seen as the most important support for nature protection and development. The Wadden islands are a much more popular touristic destination than the mainland. In order to make tourism more sustainable, the Agenda 2050 mentions to aim for quality over quantity, and that the mainland should be made more attractive for tourism. The tourism sector makes for more traffic on the Wadden Sea, while costs of dredging are already high. Melle mentioned how tourists experience how special the Wadden are, making them aware that nature protection is needed. Robbert talked about the *kombergingsbijeenkomsten*, of which he is positive about the new way of communication.

5.5: governmental actors

Multiple actors concerned with the Wadden Sea are closely connected to the Dutch government. Among the governmental actors involved in the Wadden are Rijkswaterstaat, Staatsbosbeheer, Wadden provinces Noord-Holland, Fryslân and Groningen, water authorities bordering the Wadden Sea, and the ministry of Defence. Even though these actors are all connected to the Dutch government, their activities and interests are diverging.

Rijkswaterstaat

Rijkswaterstaat is the executional organisation of the ministry of Infrastructure and Waterworks, and is concerned with safety, accessibility and liveability (Rijkswaterstaat, n.d., c). For the Wadden Sea this means that Rijkswaterstaat is involved with water, coastal and nature management, in which they prefer to giver room for the natural dynamics of tide, wind and waves (Rijkswaterstaat, n.d., d).

Staatsbosbeheer

Staatsbosbeheer, the Dutch forest management agency, is an independent management organisation connected to the ministry of LNV (Staatsbosbeheer, n.d.). Their task is to manage assigned areas and to make those useful to society in a sustainable way. Staatsbosbeheer is a former member of CWN (Michiel Firet, personal communication, October 26, 2021).

Provinces

Provinces, in this case Noord-Holland, Fryslân and Groningen, carry out both national and regional policy. Examples of provinces' tasks concerning the environment are preserving and creating nature, developing and maintaining infrastructure, and supervising the execution of environmental legislation for atmosphere, soil and water (Rijksoverheid, n.d., b).

Water authorities

The water authorities bordering the Wadden Sea from west to east are *Hoogeheemhaardschap Hollands Noorderkwartier*, *Wetterskip Fryslân*, *Waterschap Noorderzijlves*t, and *Waterschap Hunze en Aa's*. They are connected to the Wadden Sea through drainage from the mainland and through the management of dikes bordering the Wadden Sea (HHNK, n.d.; Wetterskip Fryslân, n.d.; Waterschap Noordzijldervest, n.d.; Waterschap Hunze en Aa's, n.d.).

Ministry of Defence

The Ministry of Defence has a different position compared to Rijkswaterstaat, provinces, Staatsbosbeheer, and water authorities, as it has less managerial responsibilities regarding other stakeholders. They are mentioned in this chapter, however, because they are directly connected to the government. The Ministry of Defence uses parts of the Wadden for shooting, flying, and marine practices (WaddenZee.nl, n.d., f). Among these areas are the Vliehors, which is part of the island Vlieland, the Breezanddijk, which is in the middle of the Afsluitdijk, and the western part of the Wadden Sea.

All in all, management of the Wadden is scattered and often overlaps. WaddenZee.nl (n.d., g) divides management in accessibility, salt march management, and dike management. Rijkswaterstaat is responsible for accessibility; provinces, Staatsbosbeheer, Natuurmonumenten, It Fryske Gea, Groninger Landschap and Landschap Noord Holland for salt march management; and the water authorities for the dikes on the mainland (WaddenZee.nl, n.d., g).

The experiences of governmental actors described below are from Ernst Lofvers, working for Rijkwaterstaat; Joca Jansen, working for Wetterskip Fryslân; Michiel Firet, working for Staatbosbeheer; Martijn Iping, working for Provincie Fryslân; and Karen Krijgsveld and Hans van Gasteren, both working for the Ministry of Defence.

When talking about nature, interviewees mentioned the intertidal character and fish and bird migration routes as qualities of the area. They also mentioned the international connectedness of the ecosystem that the Wadden Sea makes part of. However, where one pointed out that poor management of the Dutch Wadden Sea can cause worldwide ecosystem problems, the other pointed out that ecological disbalances in the Dutch part of the Wadden Sea are not necessarily a product of Dutch management. Another difference between the interviewees is that one works to maintain the Wadden so that it can sustain, while the other doubts if the Wadden Sea as it is now will remain, looking at the sea level rise.

Multiple interviewees experience that people expect that everything should be possible, Ernst is one of them:

"If you read the Gebiedsagenda 2050, the newest document that was created with all parties involved in the Wadden, you notice that it leans on multiple ideas: everything should be possible, everything goes parallel, and actually no clear choices are being made, everything goes on. On the one hand it says: accessibility of the islands will be maintained, because that is important for tourism, recreation and the economy, and on the other hand it says that we should dredge less because it is harmful for nature. How can we unite that? That is a big question. If you look at the total development of the system (...) we should eventually evaluate whether it is even feasible what is written down in the Agenda, will it be sustainable or not? And that will eventually lead to the point that we have to make decisions. Because it is causing more and more friction. vir

Multiple interviewees in this group mention the diverging interests of governmental actors, and the decentralization of responsibility for nature protection. Hans said the following:

"You should know that the government is outsourcing everything: so the PKB's [Planologische Kernbeslissing; spatial planning plan] we used to have, which I think protected a lot, after the decentralization they were the responsibility of the provinces. And where they can, the provinces outsource them to the municipalities (...), that has been a deterioration in my

experience (...). The government used to make a central document, in consultation with the stakeholders, but there was one PKB Waddenzee. (...) If you read those kind of documents you see that they are policy plans to which everyone should follow. Now the provinces can deviate in all kinds of ways, when you see how decentralized it is. (...). It is all up to stakeholders now to protect the Wadden Sea, and in my experience that protection has become much less (...), central guidance has disappeared completely. Vii"

Even within institutions this division is present. Take the motto of Staatsbosbeheer: protect, utilize, experience (beschermen, benutten, beleven): the first two are often in conflict with each other. Martijn mentions the importance of nature, but also the importance of liveability and economy. Joca sees how rigid legislation can be harmful to nature. Sometimes it is better for nature to compromise than to postpone a decision, she thinks:

"Sometimes protecting something really well can be more threatening and making it more difficult to achieve something, compared to when you protect something less forceful but have a common realization that it is important. I think that's a tricky one, if you make protection too rigid and too threatening, you could have an adverse effect. Because then you will not be able to move the threatened people on the sideline. And I think that that's happening right now.

Joca adds that it makes no sense to blame one party for compromising the Wadden, because in the end also the Dutch civilians are responsible for burdening nature.

To summarize, the governmental organizations have different tasks and responsibilities regarding the Wadden, of which one is nature. Among the interviewees there appeared to be the common experience that the "everything should be possible" mentality is problematic because it obstructs decision making and puts pressure on civil servants. It makes sense that this feeling is strong among people working for the government, because of the many responsibilities governmental organizations have, and because they have to deal with the diverging interests of different actors. The many responsibilities within those organizations can also turn out to be contradictory from time to time. Also the decentralization of nature management is experienced as problematic, as central steering lacks.

5.6: conclusion

This chapter described how people understand the Wadden in different ways, describing different views on nature, different interests, different beliefs, different responsibilities, and more. It became clear how people take different stances in the debate around the nature of the Wadden. These imaginaries underlie how people regard the idea of rights for the Wadden, which is discussed in chapter 7: perceived consequences of rights for the Wadden and chapter 8: notions of justice about rights for the Wadden. But first, the next chapter dives deeper into what is lying at the roots of imaginaries: values.



Chapter 6: four values underlying the imaginaries

Chapter 6: four values underlying the imaginaries

Values are directly connected to imaginaries and the understanding of hydrosocial territories, because they form the basis for the way one makes sense of the material world. Throughout the research it appeared that hydrosocial imaginaries can only be generalized per actor group up to a certain level. Even among people working for the same institution or company one will find divergent understandings of reality. Especially values appeared to be crossing the delineations of the actor groups as defined for this research. To not feel limited by the demarcations of the actor groups as defined for this research, this separate chapter discusses the most prominent values, as well as how they relate to the different actor groups. It is important to keep in mind that this chapter only categorizes values for clarification, but that values stretch further than that. Per individual the composition and overlap of values can differ, as well as how they prioritize between them. This chapter discusses the following values: 1. Ecological value of the nature system, 2. Unconditional value of the nature system, 3. Cultural value of the area, and 4. Value of the people working and living around the Wadden.

6.1: ecological value of the nature system and unconditional value of the ecosystem

Because both of those values underline the importance of nature, but in a slightly different way, they described both in this subchapter. The most important difference between these values is that for the ecological value the species, habitats and natural processes seem to be the most important, while for the unconditional value it is most important that no justification for the existence of nature is needed.

Ecological value of the nature system

If one believes in the ecological value of the nature system, they are generally in favour of disturbing natural processes as little as possible. When species or habitats or ecological functions are at risk of being destroyed due to human activity, a favourable option is to temporarily facilitate the ecology in an artificial way. The following quote of Gerrit illustrates this:

"As a temporary measure a lot is possible, just how it should be. (...) I also understand that you cannot get a whole natural system back overnight. What we are going to do now, just outside the harbour of Den Oever, is a dam. (...) It was originally meant to diminish waves. So it is a basalt dam with asphalt on top of it. Since a few years, spoonbills are nesting there, (...) and then we thought: how can we make it suitable for other birds as well? (...) So if we create a nesting site next to that dam, then you get an artificial island. (...) So in that sense, as a bridging period we hope, it is possible. But you can also go too far. (...) But in our opinion, a lot is possible. But we also say, for example to I&W, LNV or Rijkswaterstaat, if you breach some of the artificial dunes to make wash-overs (...), then that's always better. (...) Because it is an artificial system you should take artificial measures, as much as possible. ix"

The mentioned importance of the Wadden Sea as swim- and flyway and as unique and essential nature area also illustrates this value. This value also explains what some might call 'gardening': in order to preserve certain ecological processes, human intervention is seen as a necessary measure.

Unconditional value of the nature system

The unconditional value of the nature system underpins that the existence of nature does not have to be justified: we should respect nature, without being obliged to give an explanation. Wouter said the following:

"it [nature] does not have to have a human interest, it is allowed just to be there. It does not have to be there, it is allowed to be there. (...) Our natural reflex is to think about how it serves us humans, take Ecosystem Services: Ecosystem Services is simply looking into how we humans can profit from nature (...) in that way you can attach all sorts of human functions to it. I also call that a last resort measure: like you have to defend why it [nature] is allowed to be there, like it has to fulfil a service for people. And actually it doesn't have to.""

The subtle difference between this value and the value mentioned before is that the motivation of the value of nature is different: where the first values nature for its functions for the ecosystem, the second values nature with the belief that nature is valuable on itself. The second value could also be underlying the first value.

Where almost all interviewees of all actor groups explicitly recognized and acknowledged the ecological value of the nature system, only one interviewee, from actor group CWN, explicitly mentioned that no justification is needed for nature to exist. As already became clear from the previous chapter, there are many divergent ideas of what nature should be, which makes that the translation of this value into the material world causes an arena of contestation.

6.2: cultural values of the area

This value highlights the importance of the Wadden Sea as a landscape or an area. Multiple interviewees stressed the importance of the empty and open landscape as a value of the Wadden. Inherently, this value is therefore based on human experience of landscape, or nature. After all, most birds or fish probably would not be severely disturbed by or dependent on for example a lighthouse. The distinction between landscape and nature was often blurred in the interviews. Lenze explained why he thinks that the Wadden Sea is no place for windmills:

"Landscape is also part of it, it is not only nature, it is also landscape. (...) The Wadden Sea is originally a really empty monumental landscape. You only see the lighthouses, and a few trees that rise over the dike, but the past twenty years we crowded that landscape with windmills, and those kind of things. It's time that something is done about that. (...) Indeed, it has to do with maintaining what makes it valuable, people come to the Wadden Sea for the quietness, the space and the nature. And yeah, a ruined landscape is not nearly as attractive and paying off economically as a beautiful landscape that attracts people. So yeah, I think that monumental empty landscape, you have to be careful with that. What now is a common thought is that for example wind energy, that is good for the environment, so put it in nature, while excuse me, energy production is just industrial energy production, it belongs to industrial areas, like the Maasvlakte, or certain areas of the North Sea that you assign as energy production areas. That is where you can do that, but you should safeguard nature areas from those things. (...) You can only ruin your landscape once.*i"

Other interviewees also mention that it is important to let people experience the nature and landscape of the Wadden. If the much appreciated landscape changes too much, or if people are not allowed to enter the Wadden any more, people might stop caring about the Wadden. If they do not care about the Wadden any more, they stop protecting it. Therefore, it is important to give people a place within the Wadden. Robbert said the following:

"The Wadden Sea is simply not only a piece of nature (...) If nobody would know the Wadden Sea any more, well, why would you protect it? I think you should include all aspects. People live on those islands, that is simply a fact, they live and work there, and you have to take that

into account. It is about totality, with everything there is... Look, if you take the human body, it also has its iniquities, yeah, well, they are just there, you have to learn and live with that.*i"

The preservation of landscape can help to preserve ecological processes, but departs nevertheless from an anthropocentric perspective: people want to be able to experience and enjoy the landscape. In this way this value is different from the value that highlights the unconditional value of the ecosystem.

This value appeared to be prominent among members of CWN, the recreational sector, and governmental actors. Their organizations value the landscape next to nature, and recognize the landscape as one of the factors that attracts the tourists, which are on their turn needed for their support for nature protection and development. For the fishery and mining actors this value is less prominent, and would rather be part of their personal incentive. Their professional incentive in the Wadden, after all, is to catch fish and extract salt or gas.

6.3: value of the people making their living on and around the Wadden

This value stresses the importance of the people that make a living from the resources of the Wadden. In the interviews they were mentioned to be the people working on the workplace of Frisia, fishers, and people working in fish processing or on the fish markets. Essentially the concern seems to be that the jobs of these people are at danger if human activities on the Wadden are called to a halt for nature protection and preservation purposes.

The fishery representative expresses their concern for the people working in the fishery sector, including the people working on the fish market and in the fish processing. They think that if commercial fishing in the Wadden Sea would be prohibited, this will have an influence on the employment opportunities in the northern provinces:

"And it's also about employment, you know. Take a company like Heiploeg in Zoutkamp (...) it is a company that offers employment to more than five hundred people, and for a region like that, it's huge. And that leads to further complication: Wadden municipalities are generally shrinking municipalities; young people leave to the cities. And the people that remain are often people with a practical education or no education at all, and many elderly, so those are really ageing regions, which are little attractive to young people, also because of the little opportunities for employment. In some regions that is with exception of the fishery sector. And you can say, "those few ships on the Wadden Sea, what meaning do they still have", but for villages like Den Oever, (...), Zoutkamp, Lauwersoog, the fishery sector is of crucial importance for employment opportunities and tourism appeal, to offer a future to young people as well."

Johan mentions that he would like to see fishing activity in the Wadden Sea continued if the Wadden Sea would be granted legal rights. Also Jeroen mentions the matter of employment, and feels that the interests of employees of Frisia deserve attention too within the debate about nature protection and management.

This value seems prominent in the mining and fishery actor group, and less in the CWN, recreation, and governmental actor groups. This makes sense, as fishery and mining are both subject to critique in the discourse around nature management. For people working in these sectors nature management poses a potential threat to their financial income and livelihoods, causing a feeling of uncertainty.

6.4: conclusion

From this chapter it becomes clear that many different values play a role in the understanding of the hydrosocial territory. Where one regards nature as something we have to take care of, the other sees that nature will eventually find a way regardless of what people do. Where one thinks about people as greedy beings that already took too much from nature, the other sees individuals that simply try to make a living. The four values as described in this chapter appeared to be most prominent in this research. These values provide background to understand the different imaginaries of the Wadden and the different opinions about rights for the Wadden. They also help to understand the different notions of environmental justice, which are described in chapter 8.



Chapter 7: perceived consequences of rights for the Wadden

Chapter 7: perceived consequences of rights for the Wadden

This chapter elaborates about how the interviewees perceive the consequences of rights for the Wadden. One's perception about rights for the Wadden builds on their imaginary regarding the Wadden. Just like the underlying values discussed in the previous chapter, the perceived consequences of rights for the Wadden Sea vary widely among and across the actor groups as defined in this research. Therefore this chapter mentions the perceived consequences per topic, rather than per actor. The main topics as defined in this chapter are comparison to the current system of nature management, doubts about rights for the Wadden, aspects rooted in politics, and imaginations about an entity for the Wadden.

7.1: comparison to current system of nature management

Multiple interviewees wondered what would change in practice if the Wadden Sea would be granted legal rights. After all, it is already possible to challenge certain permits or activities in court. Interviewees also mention that the Wadden Sea itself cannot have a goal or interests, and that those will always be assigned to nature by people. Lambooy et al. (2019) proposed to grant the Wadden Sea legal personality in the shape of a 'natureship', which should be organized like a water authority. That means that its board members would be chosen. Interviewees raise that this might lead to nature management similar to what is in place now, because the same people with the same interests would be involved. Among those interviewees is Jaap⁴:

"If nature organizations hope to improve things with legal personality, then I foresee big problems. You have to challenge everything again and I don't think it would improve anything. (...) You find a similar system, and actually you should know, if you make the Wadden Sea a legal personality, you should know which things proponents actually want to improve (...) and the big issues that could be improved are the mussel and shrimp industries, I think those are the big issues (...) but still, it remains an interesting idea^{xiv}"

Multiple interviewees compared the idea of rights for the Wadden to the already existing Natura2000 legislation. They mentioned that it is not perfect legislation, but also pointed out that it has room for improvement. Chris thinks that it might be better to enhance Natura2000 legislation to improve current nature management:

"I think that it is rather a problem of how we go around Natura2000 goals systematics, and where the burden of proof lies when proving a significant negative effect, and in addition to that the precautionary principle, (...) so as well culmination as the evidence criterium as the precautionary principle, all together makes that at this moment more activities are allowed than in my opinion is right. And I think those are problems that should be solved to protect the values of the Wadden Sea, but whether that has to be done by granting the Wadden Sea legal personality, or that you should just enhance legislation around Natura2000... Then I think that the latter is easier and also closer to reality. Because in the end Natura2000 goals are goals we assign as people, and we do that as good as possible (...) but still I think we should acknowledge that us, humans, make those up.xv"

41

⁴ Jaap was not introduced in chapter 5: *hydrosocial imaginaries of the Wadden*, because he retired some years ago. In his working life he was closely connected to the Wadden. He was educated as biologist, and worked at the ministry of agriculture, Rijkswaterstaat, and as chair of the supervisory commission for soil subsidence in the Wadden Sea.

Geertjan says that the Natura2000 system works, although regulation can be rigid sometimes. But all in all, the advantages outweigh the disadvantages, according to Geertjan. Karen thinks that Natura2000 is one of the most objective management plans that is in place, although it has its flaws:

"One by one it is all assessed by Natura2000, but for Natura2000 a lot is possible, because before you have a significant effect on something you have to do something really weird! I think that in that way it deteriorates more and more, so I think it would be good to look for an alternative way, one that is more decisive and places people less against each other, one that doesn't promote human interests but the interests of the ecosystem.**VI"

Joca experiences that the Natura2000 laws are too rigid, resulting results in a lot of fruitless talking. According to her, it would help if there is a single party representing the nature of the Wadden:

"At the moment we are in a very complex position, because few people are willing to take a step back. (...) And then it would be helpful if there is one entity that is representing the interests of the Wadden, like 'this is what we want for it, and we are willing to make concessions if we get something else back'. Then it changes the current way, which is based on rigid nature regulation. Because now (...) it says nothing is possible, except if you compensate, and if you have no room to compensate, you can't do anything. *Vii"

All in all, the comparison of rights for the Wadden Sea to the current legislation sheds a light on different perspectives. One thinks that we should enhance the current system instead of creating a new one, while the other thinks that changing legislation may help to address the current problems of the Natura2000 legislation. This probably has to do with how people experience Natura2000 on a daily basis: Joca experiences how Natura2000 legislation restricts the work of the water authority, while people working in nature management see opportunities for improvement for Natura2000. Others doubt whether a change in legal structure would change something in practice altogether, because the interests of nature will always be assigned to it by people.

7.2: doubts about rights for the Wadden

Another topic multiple interviewees raised was the concern whether an entity for the Wadden Sea would become an additional actor. Most interviewees explicitly mentioned that another actor would not be favourable, because the current Wadden governance is already complex.

The fishery representative is one of the interviewees that think that an entity for the Wadden should not become an additional actor, because it would make governance even more complex. Jeroen doubts the creation of such an actor altogether, because he thinks that existing actors would not be willing to give up their position. The fishery representative adds that because everybody has a different idea of what the Wadden should be, it would be hard to create a sound goal for the entity representing the Wadden.

Chris doubts the idea of human representatives of the Wadden Sea: if people disagree with the representative, could the latter be dismissed? And also, he says, legal personality cannot guarantee that nothing happens to the rights holder:

"Animals are still being kept and slaughtered, even though they have certain rights, and in the end a farmer can still be expropriated (...). If the Wadden Sea would be a legal person and there would be a pressing societal interest, you could expropriate the Wadden Sea, (...) so it's not that to objects, animals or people with legal rights inherently nothing bad happens^{xviii}"

Gerrit, however, looks from another perspective: he points out that there is already an entity representing the Wadden: the *Beheerautoriteit Waddenzee*. He thinks that this *Beheerautoriteit*

could be improved by providing it with a legal status and a more powerful position and assigning it a connecting role. Martijn mentions that the *Beheerautoriteit Waddenzee* is constructed in a way that it facilitates cooperation and alignment, without being able to enforce something. Martijn is curious about what rights for the Wadden can offer, but also thinks that it is smarter to invest the current content rather than in a new organizational structure, because it is also about intention:

"I think that not only the structure is decisive, but also everybody's actual intention to work towards goals set for nature, and to be willing to attach bigger consequences to them.xix"

Apart from the entity for the Wadden being an additional actor or not, some interviewees are worried about what it would mean in practice if the Wadden would be granted rights. Jaap thinks that if the Wadden would be granted rights, everybody wants to have their say: it could lead to a societal circus. Hans foresees many lawsuits if the Wadden Sea would be assigned legal personality:

"I see it a bit differently, and that is mainly that all kinds of trouble appears. If you're a legal personality, that is new, and it means that an enormous amounts of lawsuits will take place, of which many will be about creating jurisprudence. Anyway, that is the experience I have with many other cases. And it is not something I'm looking forward to. I can imagine it really well from the perspective of the Wadden Sea, but what could be a consequence is that - from experience of four years of research in recreational disruption which shows that recreation is one of the biggest sources of disturbance – if the consequence would be to lessen recreation in the Wadden Sea, that sounds scary, to be honest. (...) The idea is not that bad, but especially the whirlwind of lawsuits that will appear in the beginning, that's a tricky one if you ask me. That will keep me busy for the coming ten years, and I'm not looking forward to that, not being a lawyer.**"

Geertjan doubts whether we should want to solve all disputes in juridical procedures: in his experience this does not necessarily lead to better outcomes.

It is clear that worries about an additional actor and emerging lawsuits are shared by many of the interviewees. Some see how the existing *Beheerautoriteit* could be upgraded to an entity for the Wadden with more juridical power. People also have doubts about how rights for the Wadden will turn out for the Wadden nature, because there are different perspectives on nature and because of the doubt that legal rights will be able to protect nature in all cases.

7.3: aspects rooted in politics

Many of the interviewees think that choices about nature are political, which corresponds to the notion of political ecology that is adopted in this research (see chapter 3: theoretical framework). Wouter remarked that, if indeed nature quality improvement goals are not met due to policy decisions as stated by consultancy firm AT Osborne, this is apparently a result of human choices. Geertjan seems to doubt that a legal framework will be the ultimate solution for nature improvement, because the eventual outcome will be shaped by political will. He does see the power of change initiated by society.

"You can also depart from the idea that we have certain intentions for the Wadden Sea, and we see that some things deteriorate. (...) You can also say that there should be far more political concern for this, and that we should therefore put more energy in the implementation of measures that enhance things again. (...) You can make a legal framework for everything, but in the end it is also about political will, (...) how much money are you willing to spend, what are we willing to change to improve things. It could be that the legal part can serve as a kind of booster, but it doesn't have to. Take the example of the power line

through Schiermonnikoog from the North Sea, there I've got the idea that it starts to turn (...) In the end you notice that the turn is not caused so much by the juridical side, but by making noise, that makes that something is changing. And the making of this noise is not initiated by the juridical side, but by the inhabitants of Schiermonnikoog (...) And if you shout loud enough, something starts to change, and that works as least as good [as the juridical way]^{xxi''}

Also Lenze brings up the matter of political will, and is convinced that it can be created:

"[Christa: do you think that it is realistic to grant legal personality to a piece of nature, for example between now and ten years?] Lenze: yes, I wouldn't know why not. I think it helps, and that it is better for everyone. [Christa: and the political will, is it going to allow it?] Lenze: political will is something you can create together. That's just a case of good collaboration, just making that the organizations that represent nature, that they do this together. But also that they work together with other institutions and organizations that would like to have a sustainable reputation. Take the Wadden ports, those are really important financially, of course. I am convinced that the ports are fine with it if the Wadden Sea would be richer and better protected, so it could be the case, as long as they don't have to be afraid about their existence, I think that they would be happy to collaborate. (...) I think it is possible, that it is a promising concept, and I support it wholeheartedly.**

Chris agrees that political will is important to apply legislation concerning nature in the right way, but does not think that granting the Wadden Sea legal personality will be the ultimate solution:

"(...) an important key lies in how politics manage nature, because next to good legislation you also need political will to apply this in the right way (...) Maybe in the end the Wadden Sea should be more in the head and the heart of people, instead of looking for a solution outside people and in the Wadden Sea itself, as is the case with legal personality. Because in the end people have to protect the Wadden Sea, the Wadden Sea cannot do that itself. [Christa: how does the Wadden Sea come in the head and the heart of the people?] I don't think by granting the Wadden Sea legal personality, but I think by acknowledging that the Wadden Sea is very important for everyone.*

The quotes above suggest that there is a common understanding that choices about nature are inherently political. Therefore, those interviewees seem to understand that a change in legal framework will not be able to change nature management instantly, but that real change mainly has to come from society. A call for different nature management from society appears to have a strong influence.

The idea of influencing politics from society upwards is related to the democratic character of the Dutch state. However, the fishery representative thinks that democracy is not as straightforward as it might appear. They points out that it is also about the amount of money, the loudness of one's voice and who is right juridically. According to them, this leads to a questionable way of policy making, which is also ineffective:

"In the Netherlands we have a democracy (...). Through that democracy we civilians choose the people that represent us, so technically you can assume that the provincial governance is a representation of people that work and live there, and that the national governance is a representation of the people that live and work in the Netherlands. (...) So technically we have a model that shapes policy according to a representation of the people. That sounds good right? Because with those policy makers we are able to make balanced decisions about what we want with an area, because those people represent us. But next to those policy makers,

we also have lobbying associations, we have a lot of nature organisations, we have civil servants with a certain passion for certain topics, who quietly would like to see something established within their term. So where you start with a quite clean democratic model that reflects what the society wants, it ends in a struggle that comes down to who has the money, who has the loudest voice, and something that is currently really important: who is right juridically seen. (...) You notice that current policy is not made according to what we really want with the country, for which we have chosen representatives, but by avoiding lawsuits. That is a completely different way of governance, in which all is juridically sealed. That means that you're not looking for the right solution, but for the safest solution. And by safest I don't mean the most balanced option, but the option that leads to the least complaints. And that can be very dangerous, because then you focus on the ones that are able to complain the most. And I think that in the case of the Wadden Sea people do their best to find balanced solutions, but it is a continuous struggle, in which stakeholders are almost forced to go along. (...) Instead of thinking how to solve things together, you're busy with becoming a party that they have to listen to. And if the only way is to be cross, then you will do that as good as possible.xxiv"

In the above the fishery representative points out that a setting in which the loudest voice is heard leads to less cooperation to solve problems. Jeroen thinks that currently certain scientists have a loud voice, while they are biased as well. He wonders whether an entity representing the Wadden Sea would be led by politicians or by scientists: those two groups would probably navigate the entity in different ways. Jeroen's view and that of the fishery representative shed a light on the negative consequences of listening to the loudest voices. Taking this information into account may help to maintain a critical view towards dominant discourses in society.

7.4: imaginations about an entity for the Wadden

Some of the interviewees thought about how an entity for the Wadden should be organized. Most were not yet familiar with the concept, and shared their first ideas. Others already thought about rights for the Wadden, and had a more nuanced view on how it should be organized. Both are described in this chapter.

Joca thinks that an entity for the Wadden should be governmental and with a clear mission, with no secondary interests such as money or profit. She adds that it should be open to negotiation with other parties, like the water authorities. One single party that stands for only the nature of the Wadden could help reduce the amount of time spent on talking, which is currently a lot, according to Joca. Others also mention that the entity representing the Wadden should not have secondary interests. In that sense, the natureship as Lambooy et al. (2019) propose is not popular among the interviewees. If a natureship would be similar to a water authority, it would mean that it would for example have fixed seats for certain actor groups. One of the interviewees thinks that the water authorities are currently dominated by farmers, and another thinks that political parties have a big influence on water authorities. All in all, organizing a natureship like a water authority would not make it represent only nature, according to multiple interviewees.

Some interviewees thought that there should not be a board structure to represent the Wadden nature, and proposed another shape of legal personality: a dialogue entity. Michiel states that the government does not meet its duties regarding nature conservation and development, even though those are established in conventions and laws. However, he is convinced that legal personality should be a goal and not a measure: in that way a discussion about values would be started instead of a juridical discussion. This could initiate a new way of thinking, which is necessary to escape the

anthropocentric mode of our society. In terms of interests of nature, both Gerwin⁵ and Michiel think that it might not be necessary for the Wadden Sea to define its desires:

Gerwin: "what grips me, a creative idea that pops into my head right now, is in line with what we both embrace: the idea that you can talk to the Wadden Sea. That's not that the Wadden Sea is going to tell you what is allowed and what is not allowed, but that the Wadden Sea asks you all kinds of questions in a conversation, it reflects and it mirrors what you plan to do, and it only asks questions. The Wadden Sea itself does not have to hear the answer. It is about the ideas that you shape according to these questions, let's say doing that is your obligation (...). And somewhere later you need a legal measure to prevent from something from happening in any case. (...) and in an ideal world you won't even have to do that. This is an idea that grips me, what we would be doing differently than making it a juridical 'allowed or not allowed' system, a kind of binary system. No, the basis would be the fundamental dialogue of what is possible in such an area, what we can do, what we maybe cannot do, what is maybe not right to do... Which only triggers you, (...) then it [the dialogue] changes.xxv"

Gerwin thinks that we are now adjusting nature to human interests and systems, while he would rather see that we adjust our human interests and systems to the processes of nature. Therefore, he doubts that legal personality would be the right solution for the problem: do we not depart from an anthropocentric perspective if we define and fit nature in our human terms and juridical system? Gerwin thinks that this causes a restriction in our way of thinking which we actually need to avoid to get out of our anthropocentric thoughts.

"It is thinking the other way around, we have to see what nature is trying to tell us. (...) Then we look at (...) everything we humans need to flourish, also in the future, and we shape this accordingly. And then you come across the word 'adapting', something I think nature is teaching us anyway: (...) nature will adapt; the fish dies and the scorpion comes back, just an example. In the whole universe everything adapts to the biggest forces of nature we can imagine, but actually, we humans are opting out of this. We don't regard ourselves as part of nature any more, but we think according to some way of manufacturability. And in that way, we concern ourselves with the economy, with ourselves, and yeah, also a bit with nature. But only if it is not bothering us too much. So you're working from the point of view of the other discourse. And whether legal personality will work or not, I don't really have an opinion about that. It sounds good right? But it might backlash because... The position of nature has to be articulated by humans for policy making, in the juridical world. And that is where I still miss the connection. So I think it is a beautiful but also a thrilling thought.*

Erika⁶ adds that by protecting something juridically you create a rigid structure, in which there is little flexibility and room to move. Gerwin adds:

"I once learnt from a lawyer (...) that the last step is organizing something juridically, when you try to command certain behaviour or action. If you take for example a street, the placement of a traffic sign, an official legal sign, you do this as a final step. Because with the

⁵ Gerwin was not introduced in chapter 5: *hydrosocial imaginaries of the Wadden*, because he was not interviewed specifically about his imaginary of the Wadden. He joined in an interview focused on the idea of rights for the Wadden. Gerwin works for *Programma naar een Rijke Waddenzee* and for Rijkswaterstaat.

⁶ Erika, just like Gerwin, was not interviewed specifically about her imaginary of the Wadden, but joined in the same group interview focused on the idea of rights for the Wadden. Erika did her internship at *Programma naar een Rijke Waddenzee*, for which she mapped the legacy of this program.

infrastructure and spatial planning you already try to command the right behaviour. And only as a last resort you create the legal part.**xvii"

Robbert talks about the *kombergingsbijeenkomsten* (see chapter 5), and wonders if these could become a legal person. He adds that in this case no group can be excluded from these meetings. Gerwin and Michiel also wonder whether an entity for the Wadden could be a dialogue entity: it would create space to pose critical questions from the perspective of nature to stimulate reflection on human activities. Michiel proposes to test how legal personality for the Wadden Sea works out: for example a law firm could represent the Wadden by reasoning from the point of view of nature. After for example 5 years the results of this pilot can be evaluated to gain further insights.

It is clear that the ideas and interpretations of how rights for the Wadden Sea could be realized varies widely among the interviewees. From the previous chapter it became clear that there are many different ideas of what nature is and should be. If rights for the Wadden is to be realized, both topics should be explored and defined. Interesting to see is the shape of the entity of the Wadden that interviewees imagine: where one assumes that it should have a traditional board structure, others think out of the box and propose to make the entity for the Wadden a dialogue shape. The latter seems to depart from the point of view that the societal debate about nature should take a turn towards a more earth- or nature-centred instead of being anthropologically centred.

7.5: conclusion

As becomes clear from this chapter, people see both the potential and pitfalls of rights for the Wadden. Some see the benefits of such an innovative nature management systems, while others would rather see that the current system would be enhanced. There also seem to be openings for compromises: multiple interviewees thought that the already existing *Beheerautoriteit Wadden* could be enhanced by providing it with more juridical power. Political unwillingness is perceived to be one of the most prominent factors obstructing a stronger position for nature protection and development. According to multiple interviewees, the solution is to change society from the bottom up: when people learn more about the importance of nature, this will eventually resonate in national politics. Also alternatives for a natureship were mentioned: an entity for the Wadden could for example be a dialogue entity, in which there is space to ask critical questions about activities on and around the Wadden. Interviewees also noted issues of justice of a rights for the Wadden arrangement, which is what the next chapter is about.



Chapter 8: notions of justice of rights for the Wadden

Chapter 8: notions of justice of rights for the Wadden

This chapter elaborates on the notions of justice that interviewees have about granting the Wadden Sea legal personality. The concept of environmental justice is used to organize and theorize these notions. The chapter aims to shed a light on the first ideas actors have about rights for the Wadden, rather than to give a final judgement. It is structured based on the four forms of environmental justice as described in chapter 3: theoretical framework: distributive justice, procedural justice, recognition justice and ecological justice.

8.1: notions of distributive justice

As became clear from chapter 5: hydrosocial imaginaries of the Wadden, many people benefit from the Wadden in a certain way. The Wadden offer gas, salt, fish, and a place for recreation. This use comes at a cost, although the proportion of these costs on nature are contested. Distributive justice is about the allocation of costs and benefits: therefore this subchapter describes the notions of justice around distribution of benefits and costs of rights for the Wadden.

Interviewees mobilized various arguments for who should pay the price for nature protection. Those were coloured by for example their perceptions about which activities burden the Wadden the most. The latter were often mentioned to be fishery, mining, and dredging. Other arguments were for example about opportunity and need.

Both the fishery and the mining sectors are strongly criticized in the societal discourse because of their perceived negative influence on nature. Therefore, some interviewees think that those sectors should stop or change their ways in order to protect nature. The people that were interviewed for the fishery and mining actor groups see it differently. Jeroen highlights that after decades of research on soil subsidence in the Wadden Sea apparently nothing shocking is noticed and points out that for example the cause of declining populations of migratory birds might lie outside the Wadden. He thinks that nature protection is important and that Frisia should pay the price if its activities would harm nature, but in his understanding the latter is simply not the case. The fishery representative mentions that the concept of 'nature protection' has a contested understanding, and that it is often also about culture and personal preferences. So the very idea to grant the Wadden rights in order to protect its nature probably leaves them sceptical. They also foresee problems for employment in the fishery sector if it would be banned from the Wadden. In these lines of thought, people losing their livelihoods as a result of rights for the Wadden could be regarded as creating an unjust balance in the distribution of costs for nature protection. Additionally, Johan points out that the fishery sector would be willing to become more sustainable if they would get the chance financially. Probably Johan would regard it as unfair if fishers have to stop their practices on the Wadden in order of nature protection if they do not even get the chance to become more nature-friendly. Essentially the question seems to be whether it is ethical to let people who depend on the Wadden financially bear the cost of preserving nature.

Dredging is another activity of which multiple interviewees perceived that it was the most harmful to Wadden nature. Rijkswaterstaat (n.d., b) mentions on their website that the total costs for fairway maintenance for the Wadden are 5.5 million euros, of which 3.5 million euros is needed to keep Ameland accessible for ferries. The users of these ferries are mainly tourists and inhabitants of Ameland. As mentioned in chapter 5: *hydrosocial imaginaries of the Wadden*, multiple interviewees proposed to navigate with different sizes of ferries according to the tides, so that less dredging is needed. If dredging is indeed harmful to the nature of the Wadden, it seems fair that the tourism sector adapts their navigation practices as well. However, the impact on nature by dredging seems to be mentioned less in the societal debate than fishery and mining.

Last of all, there is the matter of who will reap the benefits of rights for the Wadden. The idea is that nature should benefit from it in the first place. Others that will benefit are people that visit the Wadden in their spare time to enjoy nature. Maybe fishers would benefit on the long run if they can continue fishing in a sea with more fish. The mining sector would probably not benefit financially from such a legal arrangement, because their profit comes from underground, for which it simply does not matter what happens on the surface.

According to literature distributive justice is not only about burden or benefit, but also about responsibility, vulnerability and need. Therefore central questions are: who is responsible for causing harm to nature? Who is vulnerable to the bearing of costs of nature protection? And who needs the Wadden for which purpose? These questions could make new master theses on itself, and therefore I do not answer them in this research. Nevertheless, it is important to keep these questions in mind when thinking about the distributive justice of rights for the Wadden.

8.2: notions of procedural justice

Procedural justice is about participation in processes of ecosystem governance and participation in decision making. In the case of rights for the Wadden procedural justice is about who participates in the process of designing the arrangement of rights for the Wadden and the eventual realization of this arrangement.

Before creating a legal arrangement for rights for the Wadden in order to protect nature, a discussion about the very meaning of nature and nature protection should be held in order to reach common ground on the understanding of these concepts. Procedural justice is about participation in this process. From the previous chapters it appeared that people have different ideas about what nature is and what nature protection should entail. Starting a discussion about this topic in order to explore the potential of rights for the Wadden immediately reveals a difficulty: who is allowed to have a voice in this discussion? Will all actors of the Wadden be welcome to take part in this discussion, or are voices of actors that not have 'nature' (as defined in a certain way) as their primary interest not taken into account?

The second hurdle would be about the composition of a human entity for the Wadden. Who will be allowed to become a member of this entity? Some interviewees said that members of such an entity should only be concerned about nature, and that its members cannot have conflicting interests because of another company or organization they are working for. Interviewees also mentioned that an entity for the Wadden should consist of only environmental researchers in order to put the interest of nature first. Other interviewees remarked that research is biased and that researchers have secondary objectives, and that an entity for the Wadden should maybe be a representation of society instead. In that way, the entity would work towards what society thinks nature should be and towards what nature protection should entail. The latter would be in line with the idea of a 'natureship' as proposed by Lambooy et al. (2019), because it would be designed like a water authority. In a water authority, the majority of the board is chosen by Dutch civilians (Ministerie van Binnenlandse Zaken en Koninkrijksrelaties, n.d.; Rijksoverheid, n.d., c).

Some would say that rights for nature would provide the Wadden nature with a stronger juridical position, while others would say that it provides a stronger position for the people speaking on behalf of the Wadden nature. This raises a question: can nature speak for its own, or will nature's interests always be a human interpretation? This research assumes that people define the world around them, and therefore also assumes that the interests of nature will stay a human interpretation. According to this understanding, granting rights to the Wadden would change the procedural position of people speaking for the nature of the Wadden. Some people would say that

people speaking for nature already have enough power, others think the opposite. This understanding appeared to depend on how people regard the currently dominant ways of nature management.

From this subchapter it appears that procedural justice in the case of rights for the Wadden is mainly about the process of defining nature and nature management. The ideas people have about current nature management colours their ideas about rights for the Wadden. Meeting procedural justice in the creation of rights for the Wadden while also fundamentally changing the current system might prove to be difficult.

8.3: notions of recognition justice

Recognition justice is about whose identities, views, knowledge and interests are recognized. This subchapter will be about the notions of recognition justice in the case of rights for the Wadden. It is about the actors of the Wadden that are described in this research.

By granting rights to the nature of the Wadden, one recognizes a certain understanding of what the Wadden nature is and should be. This means that one recognizes a group of people with this specific understanding of nature. If this understanding is for example that morphological processes should be able to take place with as little human interference as possible, there would be a recognition of the value of an undisturbed morphological process. If the understanding of nature is that it should have a high biodiversity, the legal arrangement would recognize the value of high biodiversity. There can also be the understanding that the highest value of nature is what the biggest group of people assign to it. In order to make the process of granting rights to nature transparent, it would be wise to make the defined values of nature specific. It would also provide more clarity about whose understandings of nature are recognized.

Next to recognition of values of nature, rights for the Wadden could include or exclude recognition for cultural values, depending on its design. Similar to the definition of nature, the definition of culture has a lot of different understandings. However, this research did not aim to go into depth on this. As can be read in chapter 5, multiple organizations of CWN mention to be concerned about both nature and landscape. Landscape seems to lie at the intersection of nature and culture, as it is shaped through both natural and human processes. If the landscape aspect of the Wadden would be included in rights for the Wadden, the legal arrangement would recognize the value of the landscape of the Wadden. Not including landscape in such a legal arrangement, however, does not mean that the value of the landscape is automatically rejected. The entity for the Wadden could still legitimize another actor that is concerned about landscape and culture.

Depending on how rights for the Wadden would be designed, it could recognize or non-recognize actors that are directly and indirectly connected to the Wadden. As mentioned in the previous chapters, people are connected to the Wadden by the human activities that take place: for example through fishery and mining. These activities influence the nature of the Wadden, although the degree and severity is often contested. Nevertheless, many of these people depend on these activities for their living. An entity for the Wadden could recognize the needs and abilities of these groups and could adjust their activities and negotiations accordingly.

Lastly, there is the matter of which knowledge is recognized as being legitimate. Chapter 5 elaborated on how research on the Wadden is contested and on how regulation seems to be contradicting the knowledge of the fisher. An entity for the Wadden would inherently acknowledge and recognize the legitimacy of knowledge that they choose to use.

The level up to which rights for the Wadden would recognize interests, knowledge, views, and identities depends on its design. Recognizing a certain group does not necessarily mean that the entity for the Wadden should include their interests in their own mandate, as it can also recognize that group as an equal. Making recognition explicit could help to make the process of creating rights for the Wadden transparent.

8.4: notions of ecological justice

Ecological justice as described by Hess et al. (2021), Celermajer et al. (2021), and Schlossberg (2012) adopts an understanding of nature being an ecosystem, consisting of flora and fauna species. The level of ecological justice of rights for the Wadden would highly depend on the way rights for the Wadden are organized.

If rights for the Wadden would work towards ecological justice, it would focus its activities on the basic functioning of the ecosystem. A first question that arises is whether the current ecosystem processes should be preserved, or that they should be altered to how they were before human intervention. A reasonable answer in the light of ecological justice would be that ecological processes that are currently constrained due to human activity should be relieved in order to flourish again. This could be done by ending the human activity, and probably also by artificial intervention in the ecosystem, as long as it facilitates that ecological process while not harming other parts of the ecosystem. However, such an artificial intervention would require a lot of insight in the complexity of an ecosystem. One could argue that such artificial intervention should be kept to a minimum to avoid making mistakes. Recapping on the initial question, one could also say that ecological justice is to bring back the state of the ecosystem as it was before human activities changed it. One could say that this is the shape that a flourishing ecosystem looks like. However, due to human activities the ecosystem had to adapt and had changed accordingly: does that make it an undesired or lesser type of ecosystem? If we depart from the viewpoint in which humans are part of nature (and of the ecosystem), it is inherent that they will remain to have an influence on nature. However, which level of human impact is acceptable eventually depends on our own ethical perception. In the practical sense, the mandate of the entity for the Wadden would be shaped by the ethical perception of the people determining it. This insight reveals that rights for nature arrangements are shaped by human imaginaries, which, according to chapter 5: hydrosocial imaginaries of the Wadden, appear to be contested.

In the case that a legal arrangement for nature would be created, there is the question whether it would do more ecological justice compared to current nature management. After all, permits can be challenged in court already. Lambooy et al. (2019) explain that a natureship can make policy solely based on its own interests, as long as a balance is struck between the ministries' powers and the natureship's independence. In that way, the policy regarding the nature of the Wadden Sea cannot be influenced by other policy concerns that ministries have to deal with. In this light rights for the Wadden could be an opportunity for a better ecological justice.

Lastly, a single entity representing the ecology of the Wadden could be beneficial for ecology, as other parties can communicate and negotiate easier than in the current situation. As stated by Joca in chapter 5: *hydrosocial imaginaries of the Wadden*, it can be harmful to nature if too much time is spent on talking, rather than making a decision. Even if the decision would be one that disadvantages the ecological system, it would provide clarity, and action could be taken accordingly.

To summarize, whether ecological justice is done through legal rights for the Wadden depends on how it would be arranged and what ethical perception it adopts. If created in the wrong way, such a legal arrangement could harm ecology, which therefore reveals the risk that in the worst case,

ecological injustice is done by rights for the Wadden. A sound legal arrangement, however, could be an opportunity to make nature management less complex, if the Wadden would be represented by one single entity with a clear mandate. Next to that, rights for the Wadden could create the opportunity to make policy making regarding ecology more focused on solely nature, without being influenced by other interests.

8.5: conclusion

Looking into the notions of justice that interviewees have regarding rights for the Wadden provides an insight in the complexity of a rights of nature arrangement. It also teaches us that rights for the Wadden will inherently remain subject to human interpretations of nature, but also to interpretations of justice.



Chapter 9: discussion

Chapter 9: discussion

This chapter includes the analytical and methodological discussions of this research. The analytical discussion endeavours to add a deeper layer to the results with the help of the theoretical framework and other literature. The methodological discussion reflects on how this research was conducted and how this influenced the results.

9.1: analytical discussion

This subchapter discusses the research results presented the previous four chapters. It talks about subsequently contested imaginaries, interests, and strategies; strategic creation of discourses; contested knowledge; openings in law; distrust in national politics and shouting matches; the special position of the recreation sector; whether everything should be possible; assigning rights to nature; risks and contradictions of rights of nature; rights for the Wadden as tool for political pressure; and notions of justice.

Contested imaginaries, interests, and strategies

From the results it became clear that there are many imaginaries of the Wadden. Remarkable is that every interviewee mentioned the nature of the Wadden to be important. It appears that people have diverging ideas about how to achieve their imaginary of the Wadden, and therefore, they have different understandings about what nature management should entail. Their encounters lead to contestation and negotiation, in which strategies are mobilized to satisfy interests. Through these dynamics, hydrosocial imaginaries and territories are constantly developing. To what extent actors are successful in shaping hydrosocial territories depends on their capacity to enforce negotiation, to mobilize power, and to form strategic alliances (Boelens et al., 2016).

Because imaginaries are understandings of the material and social environment, it is impossible to judge them as right or wrong. A telling example for this is the different imaginaries of two interviewees. Where one of them mentioned that the very characteristic of the Wadden Sea is that it has a bare seafloor, the other looked further back in time to state that the Wadden Sea used to have structures on the sea floor, which we should bring back. Even though both value the nature of the Wadden, they have a different understanding about what the nature of the Wadden should look like.

People also think differently about what the biggest threat for the nature of the Wadden is. One mentions dredging, the other gas extraction, and another believes that fishery is the biggest threat. Remarkable is that none of the interviewees see their own activities as the most harmful to nature. On the one hand it makes sense that one would not admit their job is most harmful, as it may put their livelihood in danger. On the other hand not many would choose a job they think is most harmful to the Wadden nature. Interestingly, comparing the harmfulness of one's own activity to that of another could also be a discourse strategy. After all, it redirects the attention from oneself to another, and with that, the responsibility.

A similar strategy could be behind the argument that a permit is legal proof that one does no 'significant' harm to nature. Through this argument the responsibility is put on the legal framework and the actors that make decisions about the legal framework, instead of the actor carrying out the activity. It draws attention away from the fact that permits are based on certain standards and tradeoffs, and therefore not set in stone. Other people would argue that the limits of 'significant harm' as mentioned in the *Wet Natuurbescherming* are not defined right. In that line of thought an activity could be legally permitted while still causing, albeit for those people, unacceptable harm to nature. Mobilizing the argument that a permit is proof of no significant harm could, of course, also point towards a sincere belief that the permitted activity does not cause too much harm to nature.

Negotiation takes place in order to establish for example policy, legal arrangements, or regulation. An example of an outcome of negotiation is the legal arrangement VISWAD. VISWAD includes fishing fleet reduction by buying out permits as a measure for nature conservation. A struggle over territories manifests, and its outcomes shape the configuration of territories: some areas that were reserved for fishing before, are now being reserved for nature conservation.

It became clear that imaginaries and territories are continuously shaped through dynamics like contestation and negotiation, by both individuals and sectors. Discourses are mobilized to support values and interests. Boelens et al. (2016) state that the local struggles are as much about resources to sustain livelihoods as they are about the discourses that support their claim to self-define water rules, nature values and territorial meanings. In this light, one should be careful to judge over imaginaries and discourses, as they are shaped by personal values and experiences. As mentioned in chapter 3: theoretical framework, Yates et al. (2017) argue that ignoring alternative realities can lead to failing governance approaches. Therefore I argue that, when creating new ways of management, it is important to get an insight of the dynamics of imaginaries and discourses in order to understand the practice of communication and the outcome of negotiation.

Strategic creation of discourses

An important aspect in the debate about the nature of the Wadden is the creation and steering of discourses. Discourses are mobilized strategically in order to make one's voice heard and to help realize desires or to support values. By doing that, one struggles to have an influence on governance to repattern the hydrosocial territory (Boelens et al., 2016). That means that behind discourses there is often an agenda, and that they are based on perceptions of truth. Therefore a single true discourse does not exist. Battles of discourses take place in the discussion about nature of the Wadden. Remarkable is the battle of discourses between organizations that protect nature and mining companies.

Whether mining activity under the Wadden Sea should be allowed is contested. Jeroen, for example, mentioned the in his opinion activistic discourse led by certain research institutes. Others mention the in their opinion biased discourse driven by research commissioned by NAM or Frisia. Interviewees that are not in favour of these activities often do not trust the scientific research that reveals that gas or salt extraction does not cause harm to ecology. The other way around proponents of gas extraction do not trust research that points out the damage of extraction to ecology. Whether people cling to research outcomes that do or do not approve mining under the Wadden probably depends on personal views on how people should go around with nature, and how much people are allowed to take from the environment. Additionally, many people living in the north of the Netherlands regard the NAM as untrustworthy, due to gas mining induced earthquake problems under (mainland) Groningen. People that do not trust the NAM on itself will probably not trust any research done by NAM or commissioned by NAM.

Because of this widespread distrust it is natural that discourses criticizing mining activity under the Wadden exist and have many followers. However, critique on the mining sector can also be used intentionally to actively create a big group of followers. Such a discourse strategy would be effective when intending to stimulate bottom-up change. Multiple interviewees mentioned the perceived effectiveness of such bottom-up change, which is especially useful to put pressure on national politics. Many interviewees mentioned the lack of political willingness to take serious steps in nature protection. All this considered, actively steering a discourse that criticizes the mining sector is a solid strategy for change in the case of the Wadden. Whether this strong negative focus on the mining sector is valid or not is up to debate and for many probably a very personal matter. I personally think

that the widespread distrust towards mining activity under the Wadden should be taken seriously by mining companies and the Dutch government. I also think it is important keep a critical outlook on the possible effects of mining activity, but without directing the attention from the consumer to the producer. After all, most Dutch inhabitants are directly linked to the gas sector by being a consumer. I feel that critique towards the mining sector tends to overshadow the critique on the recreation sector. The latter is much less, even though numbers of tourists travelling to the islands are high, and the required dredging costs are high both financially and ecologically. Of course it is important to take into account that tourism is an important source of income for many inhabitants of the Wadden islands. Highlighting that tourists are often nature lovers, and therefore often supporters of organizations advocating for nature, I think that it is important to pay sufficient attention to harm done by the recreation sector.

Contested knowledge

As mentioned in the previous subchapter, contradicting research on the effects of mining under the Wadden exists, making knowledge contested. The very existence of these contradicting research outcomes sheds a light on the subjectivity of research. This subjectivity manifests for example through assumptions or through choices in the creation of the research method. For example, a research outcome can be that soil subsidence in the Wadden Sea is compensated by the supply of sediment, and that therefore there will not be a negative effect for the ecology of the Wadden Sea. There might be another research that reveals that there is an increased sediment supply from the North Sea, possibly leading to turbidity of the water, or disturbed sediment processes in the North Sea. Both researches have different outcomes, due to choices in method and research boundaries. The positionality of researchers influences their research, just like the choices in research design. This can explain such contradicting research outcomes. Research bias can manifest both consciously and unconsciously, and therefore intentionally or unintentionally. Unintentional research bias can occur through deep seated unconscious assumptions, or simply through choices in research boundaries and design. Intentional research bias can be due to hidden agendas and interests. In the end, it is important to recognize and acknowledge that scientific research is done by human beings, making bias unavoidable. Therefore it is essential to remain critical towards all scientific research by paying attention to the characteristics of the funder, executioner, and research.

Openings in law: 'significant' harm and the precautionary principle

Two topics regarding law that showed to be prominent in this research were the matter of 'significant harm' and the precautionary principle. Broekmeyer et al. (2008) mention that there is a risk on significant effects when an activity negatively affects the preservation goals of a Natura2000 area. They mention that it is hard to keep a score of accumulation of effects and interaction between effects, which causes uncertainty. Broekmeyer et al. (2018) conclude that the quality of decision making depends on whether these uncertainties are made explicit and how they are dealt with. This reveals that this specific part of the Natura2000 regulation leaves space for human interpretation. On the one hand, this can be an advantage, because it creates room for every unique situation. On the other hand, it is an opening in which contested understandings will arise. Such an opening can also be used stragetically to push through certain interests. Through such openings, contested understandings and 'convenient' interpretations may lead to different assessments of an activity, while based on the same law or regulation. It may be the case for the contradicting statements of outgoing minister Blok and the Waddenacademie: the first stated not to be able to refuse a permit, while the latter stated that he not only could, but even should refuse the permit. Underlying these statements may lie different interests and values, which might lead to different conclusions when interpreting the law. A similar opening lies in the precautionary principle, which has to be used in

Natura2000 areas. Askins et al. (2019) mention that this principle requires that preventative action should be taken in order to avoid irreversible changes or unforeseeable consequences, without waiting for scientific evidence of danger. In case of the Wadden the use of this principle appears to be problematic in some cases, due to contradicting research outcomes, which are on their turn based on notions of 'significant' negative effects on nature. Underlying these interpretations of 'significant' negative effects are interests and values. All in all, it can be said that interpretation and implementation of law is contested, and therefore political.

Distrust in national politics and shouting matches

Remarkable in this research was the critique on and distrust in the national government, which was shared by many. Take for example Johan, who sees a political problem in Wadden Sea management because management decisions seem to be taken with an eye on money and profit. Following this line of thought he thinks that the fishery sector has a disadvantaged position because it is not a profitable sector to the Dutch state. This sheds a light on the scalar characteristic of a hydrosocial territory: struggles on the local scale are tied to dynamics on the national scale. This particular scalar dynamic appears to play a big role for the actors of the Wadden, regarding all other critique of the interviewees on the national government mentioned in the results. Next to Johan there were other interviewees that had the idea that many policy decisions were made with an eye on financial profit, instead of nature or people. This shows that the on-the-ground reality is highly influenced by larger scales.

The latter may relate to the offensive way of communication in the discourse around the Wadden: as mentioned in the results, people raise their voices as a way to achieve their interests. It results in what some would call an activistic discourse, others would call it a shouting match. Often the idea behind such raised voices are the perceived injustice and the experience that it can be fixed when a big part of society puts pressure on national politics. This reveals the understanding that causes distrust towards national politics. It implies that if the government only seems to care about money and profit, they obviously do not care so much about nature and people. What adds to this discontent is that many people living in the north of the Netherlands experience that this area is a kind of "exploitation colony", as mentioned by several interviewees. An example mentioned multiple times is the gas extraction from the Groningen fields under the mainland: houses are being damaged due to earthquakes caused by gas extraction, but only a very small share of the profit of this gas is invested in this same area.

To summarize, what might be lying at the roots of the very prominent 'shouting discourse' is the experience that this is the only way to get your interests satisfied, and underneath the latter seems to lie the distrust towards the national government.

Special position of the recreation sector

In a way the recreational sector holds a paradoxical place in the debate around the nature of the Wadden. This is because one of the reasons to preserve nature is because people enjoy to visit it, but at the same time recreational activities disturb nature. Take for example hikers that disturb foraging birds, noisy boats that disturb sea life, or dredging to facilitate the ferries that transport tourists to the islands. However, there are important differences between recreational organizations: one might be highly motivated to teach visitors about the Wadden, while the other's priority might be to make money for a living. These motivations might manifest in a differing degree of disturbance of nature by recreation.

The general plan protect and restore nature facilitates and needs the recreational sector. It facilitates recreation in order to let people enjoy nature, but also needs these people to create support for those nature management objectives. This might be the reason that the recreation sector receives little negative attention from nature and culture organizations, compared to for example mining, shipping, and fishery. Members of these nature organizations will mainly be people that like to visit the Wadden, which might also be a reason to not put negative attention on recreation. Therefore, the recreation sector holds a relatively silent powerful position within the debate around the Wadden. This power can easily be overlooked on the first sight, even by actors working in that sector. As mentioned in chapter 5, the Wadden are a popular touristic destination, with more than a million visitors every year. These visits require for example dredging to keep the islands accessible, and such numbers of visitors will undoubtedly have an influence on flora, fauna, and ecological processes. Therefore I think it is important to advocate for and actively work towards more sustainable tourism, especially for nature and culture organizations.

Should everything be possible?

Policy regarding Wadden management often implies that it should be possible for everything to coexist. The *Agenda voor het Waddengebied 2050* mentions the intended goals for the Wadden area: Wadden nature should remain one of world class and should develop further, Wadden landscape and culture should be conserved and developed, the Wadden area should be safe to live, work and recreate, and the economic sector should excel (Rijk-rogio projectgroep, 2020). Its foundation lies on the perception that economy and ecology can reinforce each other, and that solutions can be multipurpose.

Many interviewees, especially those working in the governmental sector, experienced that this argumentation makes it hard to reach decisions and to undertake meaningful action regarding Wadden management. It would indeed be nice to meet different interests of actors around the Wadden, and up to a certain level different interests can be met with the same solution. However, in case of the Wadden, such an approach seems to restrict a process of change, rather than catalysing it. I think that we should recognize and acknowledge the limits of this current "everything should be possible" approach, in order to change Wadden management. That means that it should carefully be considered which current activities have to make place for which value, and why. There will be sectors and individuals that reap the rewards, while others pay a certain price. What we could get back is stronger, clearer, and more transparent management, on which everyone can rely to adjust their activities accordingly and for the long term.

Assigning rights to nature

In literature, the idea of granting rights to nature is often explained by comparing it to animal rights and human rights. Throughout history, certain animals and groups of people have not always had rights, but today both types of rights exist in the Netherlands. Granting rights to animals and people have never been without resistance, but still we find it hard to imagine today that once it was allowed to abuse your dog, that women were not allowed to vote, and that human beings could be held as slaves. However, even though I think that we should respect nature and ecological processes, I see an important difference between animal and human rights and rights of nature. Where humans and animals are understood to have a certain level of agency, which is the ability to take action or to choose what action to take (Cambridge Dictionary, n.d.), it is still open to debate whether nature or ecology has such agency. Additionally, it is easier to find out when an individual human or animal is harmed then to find out when nature is harmed. Therefore it is much harder to determine what rights of nature should be compared to what rights of individuals should be. As became clear from

this research the very meaning of 'nature' is contested, and the interpretation of what is best for nature will always be a human one.

If we put ourselves as human beings into perspective with the size of nature or ecology, we see that nature and ecology have already existed long before humankind, and also outside of planet Earth. I think that, whatever we humans do, nature will not stop existing. It will remain to adapt and develop with or without humans, even though this may take a very long time in terms of the human imagination. So why do we bother about the existence of nature if it will remain to exist? Maybe because we humans value nature, because we enjoy it, and because we need it. Then, do we want to protect nature, or do we want to protect what we value and what we need? In the case of the latter, we mainly want to protect ourselves. The very idea that we humans are the ones to protect all that nature entails reveals that we still have the idea that we rule over nature, that we stand above it. But does nature really needs us? Should we not respect nature for our own sake, and acknowledge that many natural processes are still too complex for humans to understand? I think that this perspective can teach us more about our motivation behind nature protection and management, and where we place ourselves relative to nature.

Risks and contradictions of rights of nature

As mentioned earlier in this chapter, interpretation and implementation of law is political. Therefore, design and management of rights of nature would also be a political process. Depending on the political playing field, a rights of nature arrangement can have multiple possible outcomes regarding mandate and measures. In Ecuador, for example, rights of nature was used by the government to justify harmful mining practices and to silence oppositional voices (Valladares & Boelens, 2019). In case of the Wadden people are at stake next to nature, as many depend on the Wadden for their income. For a rights of nature arrangement choices would be made regarding their practices in order to strive for a certain interpretation of what nature should be. This makes the design of rights of nature arrangements prone to controversy.

Next to that, a rights of nature arrangement tends to fit nature into a (legal) system designed by humans, making it prone to be defined, assessed, and controlled by humans once again. Valladares & Boelens (2017) talk about the creation of the rights of nature arrangement in Equador, and how indigenous leaders were initially sceptical towards fitting nature in the western law system. In a way, it can be seen as contradictory when humans give nature rights: in the Equadorian indigenous understanding nature gives you rights, and punishes you if you do not behave well (Valladares & Boelens, 2017). Some indigenous people in Ecuador were concerned about how a rights of nature arrangement might set norms for nature, pulling it into the (western) legal world. In that way, they mentioned, there would be a new way for the government to regulate and control nature. In the group interview with Michiel, Gerwin, and Erika a similar issue was raised: when creating a nature management system, there is a risk to create a 'hard' structure with strict boundaries, rules, and regulation. In the case of the Wadden this appears to be problematic, due to the physical dynamics of the area and due to the many contradicting interests. Therefore it might be more desirable to create a more 'soft' management system, driven by communication about norms and values. In this light, it might be valuable to think out-of-the-box for a rights of nature arrangement, like for example the kombergingsbijeenkomsten or the 'dialogue entity' (see chapter 7: perceived consequences of rights for the Wadden).

Rights for the Wadden as tool for political pressure?

Some of the interviewees imagined that rights for the Wadden could help to force national politics to pay more serious attention to nature. Valladares and Boelens (2017) state that rights of nature can

serve as a tool for political pressure by bringing contested understandings into the public debate in order to support defence of territories. Such political pressure can work in two ways: on the one hand it can promote recovery of affected territory by legitimizing political actions of those directly affected, and on the other hand it can provide guarantees to prevent from future damage (Boelens & Valladares, 2017). This may sound appealing, but as described earlier in this chapter, multiple interviewees believe that there is political unwillingness to improve nature management. If that is true, will the government be willing to implement rights for the Wadden in the first place? Additionally, the Dutch government is chosen via a democratic way. Does this mean that for the majority of the Dutch civilians new nature management is not a priority? If that is the case, one could doubt whether the government should put their energy in new ways of nature management. Despite this apparent contradiction, there might also be a middle ground: the government could choose to adopt a measure which protects the goals set for nature, by implementing an entity that can legally challenge governmental decisions.

Notions of justice

Interviewees had different notions of justice regarding rights for the Wadden. Many of these notions would depend on the eventual design of the legal arrangement. Ultimately, rights for the Wadden will remain subject to interpretations of nature, but also to interpretations of justice. For instance, choices would have to be made in who will be able to participate in the design of rights for the Wadden, whose knowledge is recognized, and who will pay the price for achieving nature goals. Additionally, choices have to be made between people and nature, for example how much people should give up in order to protect nature. Looking into notions of justice provides us with a better understanding of trade-offs that have to be made in the search for new nature management. It also sheds a light on the opportunities for new ways of nature management, because notions of justice are changing over time. What becomes clear is that ecological justice will always be mediated by humans, and therefore will remain closely related to other dimensions of environmental justice.

Remarkable is that many countries that constitutionally recognize rights of nature have a history of colonization, where the indigenous group is often marginalized. Looking deeper into existing rights of nature cases teaches that in many situations there are disputes over values of indigenous and non-indigenous peoples. Knauß (2018) argued that here is a strategic dimension to promoting rights for nature as a mutual interest of indigenous and non-indigenous peoples. The Wadden does not have a colonization history, though some interviewees argued that the north of the Netherlands functions as a kind of exploitation colony for the rest of the Netherlands. However, compared to countries that were once colonized and now recognize rights of nature, in the Wadden there is the shared characteristic of clashing imaginaries of what nature is and how to go around with it. Therefore, opportunities of a rights for the Wadden arrangement might lie in finding common ground within contested imaginaries about nature.

9.2: methodological discussion

This chapter elaborates on the way this research was carried out and how this has possibly influenced the results.

First of all, it is important to realize that for this research a limited selection of actors was chosen in order to keep it within the assigned time frame. Although the actor groups were carefully selected during the process of making a research proposal, other actor groups appeared to be interesting to look into as well. Those are the Wadden harbours, commercial shipping companies, and inhabitants of the Wadden area. Conducting the same research among these actors would provide a more diverse data base in the topic of imaginaries and rights for the Wadden. The Wadden harbours and

commercial shipping companies are deeply connected to the issue of dredging, and would therefore probably be affected by a rights for the Wadden legal arrangement. Next to harbours and shipping companies, the inhabitants of the Wadden area are an important actor group. They are the inhabitants of the Wadden islands and the mainland bordering the Wadden Sea and would be affected by rights for the Wadden through their employment and living environment. However, their voices are indirectly and partly represented in this research, because some people among the group of interviewees were inhabitants of the Wadden area next to being part of one of the actor groups defined for this research.

This sheds a light on a second point of discussion, which is that the defined actor groups are categorized in where people are employed. When responding in an interview, people do not break down to this single characteristic. Therefore it is important to realize that the responses of interviewees will be influenced by possibly their place of residence, age, political preferences, and countless other characteristics. In that way the interview outcomes appeared to be colourful and often crossed the boundaries of the defined actor groups. However, to make this an orderly report some generalizations were made and indicated where necessary.

The third point of discussion is about the number of interviewees per actor group. People from some actor groups were more open to be interviewed than people from other actor groups. This has had an influence on chapter 7 and 8, which were about the stance actors take in the debate around rights for the Wadden, for which the interviews were the only source of information. This led to a less diverse representation of the actor groups mining companies and fishery actors, compared to the other actor groups.

A fourth point of discussion is me, the researcher. Who I am as a person influences the interpretation of my observations, because of certain understandings, experiences, and prejudices. It is important to be open about who I am as a researcher, because it supports the transparency of the research. Therefore I expressed my positionality throughout the discussion and conclusion of this research.

Lastly, because the research process was iterative, the focus of this research became more clear during the data gathering and analysis. This led to the idea of adding a chapter about justice after conducting the interviews. Therefore, during the interviews no specific questions were asked about distributional, procedural, recognition, and ecological justice. However, many times the conversation came to interpretations of justice, and because of that it seemed logical to add this chapter. This choice shows through the slightly different shape of this chapter, which is reflecting rather than noting, compared to the other chapters of the results.



Chapter 10: conclusion

Chapter 10: conclusion

This research started by addressing the knowledge gap in the information about how people define the Wadden Sea and what stance they take in the debate about granting the Wadden Sea legal personality. The results were discussed through a political ecology lens, regarding society, politics, and nature as inseparable. The results were theorized by using the concepts of hydrosocial territories and imaginaries. This last chapter provides an answer per research question and places the research outcomes in a bigger picture.

Hydrosocial imaginaries and underlying values

The first and second research question are closely related, and will therefore be discussed together in this subchapter. The first research question sought to get an insight in the current hydrosocial territorial imaginaries of the actor groups as defined for this research; the second research question aimed to reveal the values lying at the roots of those imaginaries. Even though it appeared that imaginaries cannot easily be categorized per actor group, there are certain commonalities. They are described below per actor group.

Member organizations of CWN generally agree that harmful human impact on nature should be solved through education, communication, and persuasion. For this research it is interesting to note that most of those organizations advocate for both nature and culture. It provides the insight that the interests of these organizations are focused on more than ecology. People working in the fishery sector remarked how regulation changes too fast to make big investments, while they are simultaneously asked to adopt more sustainable practices. They mention to feel driven into a corner, frustrated, and uncertain about their livelihood. Mining companies NAM and Frisia state that the effect of their activities on nature is not disconcerting, because the sedimental dynamics of the Wadden compensate for subsidence of the deep soil. Research outcomes on this matter appear to be contradicting, and of all debates around the Wadden Sea this one currently seems the biggest. In both the fishery and mining sector there seems to be an understanding that some measures for nature protection make no sense, as it is argued that they are based on popular belief rather than on facts. This is frustrating for many, as the existing livelihoods may depend on choices in nature management. The recreation sector is broad in both activities and characteristics. Remarkable is the position of this sector. On the one hand, recreation is big on the Wadden and its islands: over a million tourists visit the area every year, leaving traces of disturbance of nature. On the other hand, the governmental plan for the Wadden (Agenda voor het Waddengebied 2050) recognizes tourists to be a big source of support for nature protection. This makes that the recreation sector, in comparison to fishery and mining, is scarcely criticized in the discourse around human effects on nature. The position of governmental organizations regarding the Wadden is one of tasks and responsibilities, of which one is nature. Multiple interviewees working for governmental organizations experienced that "everything should be possible", regularly causing difficulties in decision and policy making.

Values underlie how people make sense of reality. Four telling values were discussed in this research: ecological value of nature, unconditional value of the ecosystem, cultural value of the area, and value of the people working and living around the Wadden. These values were found across the defined actor groups, and their composition and ranking differs per individual. Also many subtle variations and interpretation of these four values exist.

In order to express one's interests and values certain strategies are used. Around the Wadden, there appears to be a strong debate in which different discourses are mobilized. These discourses are driven by deep-seated values and beliefs, which makes for a heated discussion. The matter of

contradicting research outcomes around the impact of mining on nature probably relates to how people interpret the material world, as research design and analysis is based on conscious and unconscious assumptions. Next to mobilization of discourses, openings in the law systems are used to advocate for interests. The unclear definition of 'significant harm' is probably the most prominent example for this, as it leaves a lot of room for interpretation. In this crowded arena of discussion and contestation, negotiation takes place in order to unite interests where possible and make decisions where needed.

Even though all interviewees said to value nature, they have different ideas about what nature should be, what nature management should entail, and how territories should be shaped accordingly. Adding the underlying interests and values to the picture shows that Wadden nature management is an arena of contestation.

Perceived consequences of legal rights for the Wadden and notions of justice

The third and fourth research questions are both about the idea of rights for the Wadden, and therefore their answers are combined in this subchapter. What people think about the consequences and fairness of such a legal arrangement depends highly on the imaginaries they have about the Wadden.

Comparing rights for the Wadden to the current system of nature management led to various outcomes. Where some would think that interests for nature get a stronger juridical position, others do not see how it would be different from the current legal arrangement around nature, which is already designed to protect and maintain. Additionally, some people doubt whether a change in legal structure would change nature management altogether, because in the end it will always be humans that define interests for nature. Another topic interviewees brought up is the complexity of the current legal system. However, where some thought that legal personality would only make it more complex, others thought that it might provide the opportunity to make a single entity representing nature, making it less complex. Some interviewees raised that with the introduction of rights for the Wadden a lot of new lawsuits might appear to rechallenge activities or permits. Interviewees feared that this would lead to an enormous amount of administrative work. Some of them thought that, in order to mitigate such effects, it might be better to change the existing legal framework, by for example upgrading the Beheerautoriteit Wadden with more juridical power and assets. Others contemplated that fitting nature in the western legal system could put nature in a place where it is dominated by humans, maintaining a system focused on humans instead of earth- or nature-centred. Therefore, when designing a rights for the Wadden arrangement, it might be good to look into more innovative ideas, like the mentioned dialogue entity. When talking about rights for the Wadden also the matter of the definition of nature was raised, and doubts about possible outcomes were expressed. After all, what nature is and should be is highly contested, even among people working in nature and culture organizations. This relates to the matter of what is good for nature, or what nature wants. Because of the vastness and complexity of the ecosystem, defining rights for nature is less straightforward compared to for example animal rights.

From the interviews and the literature it became clear that many people doubted the political will of the Dutch government to improve nature management. People blame the government of prioritizing financial interests over goals set for nature. People advocating for a change in nature management raise their voices in order to put pressure on politics. Some of them think that rights for the Wadden might be a tool to force the government to take better care of nature. Others doubt whether the government would be willing to adopt this legal measure altogether. Another important contemplation in the topic of politics is the democratic character of the Dutch state. The Dutch house

of representatives should be a reflection of society, and therefore our system of nature management seems to be an outcome of this representation of society. Some people argue that prominent politicians and ministers are not to be trusted, because they do not live up to their promises. However, one thing that is clear is that people's attitude towards the government plays a big role in the debate around nature management.

Notions of justice of a rights for the Wadden arrangement would highly depend on its design. The subtle but important characteristic of such an arrangement is that not nature per se gets a stronger juridical position, but the people advocating for nature. This reflects in the perceptions of justice of rights for the Wadden, because people have different ideas about what nature management should entail. Therefore one of the matters around justice is about who can join in the design of the entity for the Wadden. On the one hand the entity would be designed for nature, and in that light it would make sense to not let people with financial interests take part in the design. On the other hand, all of the interviewees mentioned nature to be important, even though they had other ideas of what nature should be. What can be learned from looking into matters of justice is that, in order to design a rights for the Wadden arrangement, a lot of choices about values and knowledges should be taken, and therefore there would be winners and losers. The complexity lies in that nature's interests will remain a human interpretation, and that justice for nature will always be mediated by humans. Therefore ecological justice will remain closely related to dimensions of environmental justice, like procedural, distributional, and recognition justice.

As is now clear, the perceived consequences and justice of rights for nature depends on its design and execution. Maybe even more interesting are the questions these topics evoke. Thinking about rights for nature requires a reflection on both nature and on society, because ecological justice is intertwined with other dimensions of social justice. This reflection will provide an insight in the opportunities and trade-offs that are tied to the creation of new policy arrangement for nature.

Global trends regarding use of nature and rights of nature

There appears to be a growing critique towards the boundary-pushing use of natural resources of the Wadden for financial profit. The latter reflects in the *Agenda voor het Waddengebied 2050*, which tries to combine economic interests with protection of nature, presenting an outcome which hints towards the idea that everything should remain possible. To counter this way of handling nature, an alternative way of nature management was proposed: granting the Wadden legal personality.

The case of the Wadden fits the larger global picture in which counter movements react to the excessive use of nature for financial profit by putting pressure on companies and governments to change practices. There is a growing realization that human activity has led to all kinds of effects like global warming, pollution, loss of species and habitats, and that more is yet to come. Counter movements argue that the constant hunger for economic growth exploits nature up to irreversible destruction, endangering both ecological systems and human existence. This causes growing concern for the near future and for the lives of future generations. Rights of nature as a measure against the excessive human use of nature is gaining popularity on an international scale.

The idea of granting rights to the Wadden fits in this trend. However, the practical implementation of rights of nature does not automatically grant a better position to marginalized nature or people. On the one hand, rights for nature could be a legal translation of a shared appreciation of nature (Knauß, 2018), while on the other hand in Ecuador it turned out to be a useful tool for the government to justify harmful mining practices and to silence oppositional voices, as Valladares and Boelens (2019) argued. This shows that the practical implementation of a rights of nature arrangement depends on political factors, and is subject to human interpretation of how to go around with nature.

Conclusion

This research showed that the interpretations of what nature is and what nature management should entail are contested. It became clear that the interests of nature remain a human interpretation. Clearly rights for the Wadden fits the international debate how humans should go around with nature. However, dealing with contested definitions of nature may appear to cause a considerable obstacle when designing such a legal arrangement. Maybe more interesting than the outcome is the discussion that rights of nature starts, which is about the position of humans towards nature, the characteristics of our society, and ecological and social justice.

References

Askins, A., Lyver, P. O, Alrøe, H. F., Moller, H. (2019). The universal precautionary principle: new pillars and pathways for environmental, sociocultural, and economic resilience. Sustainability, 11(8), 2357.

AT Osborne. (2018). Verkenning beheerautoriteit Waddenzee: varianten voor de verbetering van het beheer van de Waddenzee. Retrieved on 4/10/2021 from https://zoek.officielebekendmakingen.nl/blg-892552

Baletti, B. (2012). Ordenamento Territorial: Neo-developmentalism and the struggle for territory in the lower Brazilian Amazon. Journal of Peasant Studies, 39(2), 573–598. doi:10.1080/03066150.2012.664139

Beheerautoriteit Waddenzee. (n.d.). In welke context werken wij? Retrieved on 13/1/2022 from https://www.beheerautoriteitwaddenzee.nl/over-beheerautoriteit-waddenzee-nieuw/in-welke-context-werken-wij

Bing Wang, Z., Elias, E. P. L., van der Spek, A. J. F., Lodder, Q. J. (2018). Sediment budget and morphological development of the Dutch Wadden Sea: impacy of accelerated sea-level rise and subsidence until 2100. Netherlands Journal of Geosciences - geologie en mijnbouw, 97-3, 183-214.

Boelens, R., Hoogesteger, J., Swyngedouw, E., Vos, J., & Wester, P. (2016). Hydrosocial territories: a political ecology perspective. Water International, vol. 4, no. 1, 1-14. http://dx.doi.org/10.1080/02508060.2016.1134898

Borràs, S. (2016). New Transitions from Human Rights to the Environment to the Rights of Nature. Transnational Environmental Law, 5:1 (2016), pp. 113–143. doi:10.1017/S204710251500028X

Broekmeyer, M.E.A., Opdam, P.F.M, and Kistenkas, F.H. (2008). Het bepalen van significante effecten: omgaan met onzekerheden. Wagenigen University and Research, Alterra. Alterra-rapport 1664, ISSN 1566-7197.

Cambridge Dictionary. (n.d.). Agency. Retrieved on 5/4/2022 from https://dictionary.cambridge.org/dictionary/english/agency

CBS. (2017). Trendrapport toerisme, recreatie en vrije tijd 2017; Deel 2 Statistieken. ISBN: 978-94-91625-05-3

Celermajer, D., Schlosberg, D., Rickards, L., Stewart-Harawira, M., Thaler, M., Tschakert, P., Verlie, B. and Winter, C. (2021). Multispecies justice: theories, challenges, and a research agenda for environmental politics. Environmental Politics, 30:1-2, 119-140, DOI: 10.1080/09644016.2020.1827608

Danso, A., Adomako, S., Lartey, T., Amankwah-Amoah, J., Owusu-Yirenkyi, D. (2020). Stakeholder integration, environmental sustainability orientation and financial performance. Journal of Business Research, 119, 652–662. https://doi.org/10.1016/j.jbusres.2019.02.038

Dr. Robert Bullard. (n.d.). Biorgaphy. Retrieved on 8/3/2022 from https://drrobertbullard.com/biography/

EenVandaag. (2020). Zoutwinning in de Waddenzee? 'Waarom halen ze het niet ergens anders vandaan?' Retrieved on 5/10/2021 from https://eenvandaag.avrotros.nl/item/zoutwinning-in-de-waddenzee-waarom-halen-ze-het-niet-ergens-anders-vandaan/

Fish & Farm. (2018). Visserij op de Waddenzee in vogelvlucht: een overzicht van belanghebbenden en ontwikkelingen gekoppeld aan visserij op de Waddenzee. Retrieved on 7/10/2021 via https://www.waddenacademie.nl/organisatie/publicatie-lijst/publicatie-detail/visserij-op-de-waddenzee-in-vogelvlucht-update

Foucault, M. (1980). Power/knowledge. In C. Gordon, (Ed.). Foucault. Power/knowledge: Selected interviews and other writings 1972–1978. New York, NY: Pantheon Books.

Frisia Zout B.V. (2020). Start zoutwinning Waddenzee. Retrieved on 16/3/2022 from https://frisiazoutharlingen.nl/nieuws/nieuwsberichten/32-start-zoutwinning-waddenzee

Frisia Zout B.V. (n.d., a). Zoutproductie Harlingen. Retrieved on 10/3/2021 from https://frisiazoutharlingen.nl/

Frisia Zout B.V. (n.d., b). Over ons. Retrieved on 16/3/2022 from https://frisiazoutharlingen.nl/over-ons

Frisia Zout B.V. (n.d., c). Meest gestelde vragen. Retrieved on 16/3/2022 from https://frisiazoutharlingen.nl/vraag-antwoord

Gurney, G.G., Cinner, J., Ban, N.C., Pressey, R.L., Pollnac, R., Campbell, S.J., Tasidjawa, S., Setiawan, F. (2014). Poverty and protected areas: An evaluation of a marine integrated conservation and development project in Indonesia. Global Environmental Change 26, 98–107. https://doi.org/10.1016/j.gloenvcha.2014.04.003

Heslinga, J., Groote, P., Vanclay, F. (2019). Strengthening governance processes to improve benefit-sharing from tourism in protected areas by using stakeholder analysis. Journal of Sustainable Tourism, 27:6, 773-787, DOI: 10.1080/09669582.2017.1408635

Hess, D., J.; McKane, R., G.; Pietzryk, C. (2021). End of the line: environmental justice, energy justice, and opposition to power lines. Environmental Politics, DOI: 10.1080/09644016.2021.1952799

Het Groninger Landschap. (n.d.). Stichting Het Groninger Landschap. Retrieved on 2/3/2022 from https://www.groningerlandschap.nl/wat-wij-doen/organisatie/stichting/

Holland, B. (2017). Procedural justice in local climate adaptation: political capabilities and transformational change. Environmental Politics, 26 (3), 391–412. https://doi.org/10.1080/09644016.2017.1287625

Hoogheemraadschap Hollands Noorderkwartier (HHNK). (n.d.). Wat doet HHNK? Retrieved on 2/3/2022 from https://www.hhnk.nl/wat-doet-hhnk

It Fryske Gea. (n.d.). Wie zijn wij? Retrieved on 2/3/2022 from https://www.itfryskegea.nl/organisatie/

IUCN. (2021). Call to withdraw draft-permit mining of fossil fuels underneath UNESCO World Heritage Site Wadden Sea. retrieved on 14/4/2022 from https://www.iucncongress2020.org/motion/133

K+S. (2019). K+S bundles business in K+S Minerals and Agriculture GmbH. Retrieved on 16/3/2022 from https://www.kpluss.com/en-us/press/press-releases/KS-bundles-business-in-KS-Minerals-and-Agriculture-GmbH/

Kauffman, C. M. and Martin, P. L. (2018). Constructing Rights of Nature Norms in the US, Equador, and New Zealand. Global Environmental Politics 18:4, November 2018, doi:10.1162/glep_a_00481

Knauß, S. (2018). Conceptualizing Human Stewardship in the Anthropocene: The Rights of Nature in Ecuador, New Zealand and India. Journal of Agricultural and Environmental Ethics (2018) 31:703–722 https://doi.org/10.1007/s10806-018-9731-x

Lambooy, T., van de Venis, J., & Stokkermans, C. (2019). A case for granting legal personality to the Dutch part of the Wadden Sea. *Water International*, *44*(6-7), 786-803. https://doi.org/10.1080/02508060.2019.1679925

Landschap Noord-Holland. (n.d.). Ons verhaal: van kleine stichting naar breed natuurnetwerk. Retrieved on 2/3/2022 from https://www.landschapnoordholland.nl/ons-verhaal

Lau, J., D.; Gurney, G., G.; Cinner, J. (2021). Environmental justice in coastal systems: perspectives from communities confronting change. Global Environmental Change, Vol. 66. https://doi.org/10.1016/j.gloenvcha.2020.102208

Mer: commissie voor de milieueffectrapportage. (2020). Monitoring aardgaswinning onder de Waddenzee vanaf de locaties Moddergat, Lauwersoog en Vierhuizen. Retrieved on 2/3/2022 from https://www.commissiemer.nl/docs/mer/p34/p3467/3467 advies auditcommissie aardgaswinning waddenzee.pdf

Mer: commissie voor de milieueffectrapportage. (2021). Zoutwinning Waddenzee: advies auditcommissie over monitoringsprogramma en nulmeting. Retrieved on 15/3/2022 from https://www.commissiemer.nl/docs/mer/p35/p3573/3573 advies auditcommissie.pdf

Ministerie van Binnenlandse Zaken en Koninkrijksrelaties. (n.d.). Bestuurlijke indeling van Nederland. Retrieved on 13/4/2022 from https://kennisopenbaarbestuur.nl/thema/bestuurlijke-indeling-van-nederland/

Murcia Today. (2022). Spanish MPs vote to give Mar Menor lagoon personhood and rights. Retrieved on 29/4/2022 from

https://murciatoday.com/spanish mps vote to give mar menor lagoon personhood and rights 1759340-a.html

NAM. (n.d., a). Gaswinning onder de Waddenzee. Retrieved on 7/10/2021 from https://www.nam.nl/gas-en-oliewinning/wadden/gaswinning-onder-de-waddenzee.html

NAM. (n.d., b). NAM interactieve kaart. Retrieved on 16/3/20222 from https://nam-feitenencijfers.data-app.nl/geotool/nam.html

Natura 2000. (n.d., a). Natura 2000. Retrieved on 13/10/2021 from https://www.natura2000.nl/

Natura 2000. (n.d., b). Waddenzee. Retrieved on 13/10/2021 from https://www.natura2000.nl/gebieden/friesland/waddenzee

Natura2000. (n.d., c). Natura 2000 gebieden. Retrieved on 8/3/2022 from https://www.natura2000.nl/gebieden

Natuurmonumenten. (n.d.). Over Natuurmonumenten. Retrieved on 2/3/2022 from https://www.natuurmonumenten.nl/over-natuurmonumenten

Netherlands Tourism. (n.d.). The Wadden Islands. Retrieved on 30/4/2022 from https://www.netherlands-tourism.com/wadden-islands/

NOS. (2016). Hoe groot is het 'probleem' van boren op de Waddenzee? Retrieved on 16/3/2022 from https://nos.nl/artikel/2113044-hoe-groot-is-het-probleem-van-boren-op-dewaddenzee

NOS. (2021). Nieuwe gaswinning onder de Waddenzee lijkt nauwelijks tegen te houden. Retrieved on 5/10/2021 from https://nos.nl/artikel/2397841-nieuwe-gaswinning-onder-de-waddenzee-lijkt-nauwelijks-tegen-te-houden

NOS. (2022). Shell wil aansprakelijkheid van de NAM in Groningen afkopen. Retrieved on 16/3/2022 from https://nos.nl/artikel/2415752-shell-wil-aansprakelijkheid-van-de-nam-in-groningen-afkopen

O'Donnel, E. L. (2018). At the intersection of the sacred and the legal: rights of nature in Uttarakhand, India. Journal of Environmental Law, 2018, 30, 135–144 doi: 10.1093/jel/eqx026

Overheid.nl. (n.d.). Besluit algemene regels ruimtelijke ordening. Retrieved on 8/3/2022 from https://wetten.overheid.nl/BWBR0030378/2020-12-01

Pecharroman, L. C. (2018). Rights of Nature: Rivers That Can Stand in Court. Resources 2018, 7, 13. doi:10.3390/resources7010013

Programma naar een Rijke Waddenzee. (n.d.). Programma naar een rijke Waddenzee: programmaplan 2019-2022 Wad veerkrachtig! Retrieved on 2/3/2022 from https://rijkewaddenzee.nl/programmaplan/

Rambaree, K., Sundström, A., Wang, Z., & Wright, S. A. I. (2021). Qualitative Stakeholder Analysis for a Swedish Regional Biogas Development: A Thematic Network Approach. *Sustainability*, 13(14), 8003. https://doi.org/10.3390/su13148003

Reed, M. S., Graves, A., Dandy, N., Posthumus, H., Hubacek, K., Morris, J., Prell, C., Quinn, C. H., Stringer, L. C. (2009). Who's in and why? A typology of stakeholder analysis methods for natural resource management. *Journal of environmental management*, *90*(5), 1933-1949. https://doi.org/10.1016/j.jenvman.2009.01.001

Rijk-regio projectgroep. (2020). Agenda voor het Waddengebied 2050: koersen naar een veilig, vitaal en veerkrachtig Waddengebied in 2050. Ministerie van Infrastructuur en Waterstaat. Retrieved on 16/3/2022 from

https://agendavoorhetwaddengebied2050.waddenzee.nl/fileadmin/content/ga_wadden2050/pdf/Agenda-voor-het-Waddengebied-2050.pdf

Rijksoverheid. (n.d., a). Natura2000. Retrieved on 8/3/2022 from https://www.rijksoverheid.nl/onderwerpen/natuur-en-biodiversiteit/natura-2000

Rijksoverheid. (n.d., b). Provincie voert landelijk en eigen beleid uit. Retrieved on 12/10/2021 from https://www.rijksoverheid.nl/onderwerpen/provincies/taken-provincie

Rijksoverheid. (n.d., c). Stemmen bij de waterschapsverkiezingen. Retrieved on 13/4/2022 from https://www.rijksoverheid.nl/wetten-en-regelingen/productbeschrijvingen/stemmen-waterschapsverkiezingen

Rijkswaterstaat. (n.d., a). Wet natuurbescherming. Retrieved on 8/3/2022 from https://www.infomil.nl/onderwerpen/landbouw/mest/handreiking/juridisch-kader/wet/

Rijkswaterstaat. (n.d., b). Bereikbaarheid Waddeneilanden. Retrieved on 14/3/2022 from https://www.rijkswaterstaat.nl/water/waterbeheer/beheer-en-ontwikkeling-rijkswateren/waddenzee/bereikbaarheid-waddeneilanden

Rijkswaterstaat. (n.d., c). Onze organisatie. Retrieved on 12/10/2021 from https://www.rijkswaterstaat.nl/over-ons/onze-organisatie

Rijkswaterstaat. (n.d., d). Waddenzee. Retrieved on 12/10/2021 from https://www.rijkswaterstaat.nl/water/waterbeheer/beheer-en-ontwikkeling-rijkswateren/waddenzee

Schlosberg, D. (2012). Justice, ecological integrity, and climate change. In: A. Thompson and J. Bendik-Keymer. Ethical adaptation to climate change. Cambridge: MIT Press, 165–184.

Schlosberg, D. (2013). Theorising environmental justice: the expanding sphere of a discourse. Environmental Politics, 22:1, 37-55, DOI: 10.1080/09644016.2013.755387

Schroor, M. (2018). Landschapsbiografie van het Waddengebied: historisch-landschappelijke karakteristieken en hun ontstaan. Rijksdienst voor het Cultureel Erfgoed en Staatsbosbeheer, Amersfoort.

Schuttenhelm, R. (2017). De toekomst van de Waddenzee: een stijgende zeespiegel over een dalende bodem. De Waddenvereniging, Harlingen.

Sijtsma, F. J., Broersma, L., Daams, M. N., Hoekstra, H., Werner, G. (2015). Tourism Development in the Dutch Wadden Area: Spatial-Temporal Characteristics and Monitoring Needs. Environmental Management and Sustainable Development, Vol. 4, No 2. doi:10.5296/emsd.v4i2.8561

Staatsbosbeheer. (n.d.). Organisatie. Retrieved on 12/10/2021 from https://www.staatsbosbeheer.nl/Over-Staatsbosbeheer/Organisatie

Staatstoezicht op de Mijnen (SodM). (n.d.). Olie- en gaswinning. Retrieved on 16/3/2022 from https://www.sodm.nl/sectoren/olie--en-gaswinning

Steger, M. B., & Paul, J. (2013). Levels of subjective globalization: Ideologies, imaginaries, ontologies. Perspectives on Global Development and Technology, 12(1–2), 17–40. doi:10.1163/15691497-12341240

Sundström, A. (2009). Globalization, CSR and Business Legitimacy in Local Relationships. Swedish University of Agricultural Sciences: Uppsala, Sweden, 2009; ISBN 978-91-86195-70-0.

Swyngedouw, E. (2004). Globalisation or 'glocalisation'? Networks, territories and rescaling. Cambridge Review of International Affairs, 17(1), 25–48. doi:10.1080/0955757042000203632

Swyngedouw, E. (2015). Liquid power: contested hydro-modernities in 20th century spain. Cambridge, MA: MIT Press.

UNESCO. (n.d., a). The Criteria for Selection. Retrieved on 5/10/2021 from https://whc.unesco.org/en/criteria/

UNESCO. (n.d., b). Wadden Sea. Retrieved on 5/10/2021 from https://whc.unesco.org/en/list/1314

United States Environmental Protection Agency (US EPA). (2019). EPA annual environmental justice progress report FY 2019. Retrieved on 8/3/2022 from https://www.epa.gov/environmentaljustice/annual-environmental-justice-progress-reports

Valladares, C. & Boelens, R. (2017). Extractivism and the rights of nature: governmentality, 'convenient communities' and epistemic pacts in Ecuador, Environmental Politics, 26:6, 1015-1034, DOI: 10.1080/09644016.2017.1338384

Valladares, C. and Boelens, R. (2019). Mining for Mother Earth. Governmentalities, sacred waters and nature's rights in Ecuador. Geoforum 100, 68-79. https://doi.org/10.1016/j.geoforum.2019.02.009

Visserij.nl. (2021). Negentien garnalenvissers Waddenzee laten zich uitkopen. Retrieved on 2/3/2022 from https://visserij.nl/2021/05/04/negentien-garnalenvissers-waddenzee-laten-zich-uitkopen/#sidr-nav

Vogelbescherming Nederland. (n.d.). In vogelvlucht. Retrieved on 2/3/2022 from https://www.vogelbescherming.nl/bescherming/wat-wij-doen/in-vogelvlucht

Wadden Sea World Heritage. (n.d., d). Trilaterale Waddenzee Samenwerkeing. Retrieved on 7/10/202 from https://www.waddensea-worldheritage.org/nl/trilaterale-waddenzee-samenwerking

Waddenacademie. (2021). Juridisch advies inzake Natura 2000 en gaswinning onder de Waddenzee (project gaswinning Ternaard) [letter, PDF]. Retrieved on 14/4/2022 from https://www.waddenacademie.nl/nieuws/nieuwsbericht/waddenacademie-brengt-juridisch-advies-uit-inzake-natura-2000-en-gaswinning-onder-de-waddenzee-project-gaswinning-ternaard

Waddenvereniging. (2017). Schokkende resultaten onderzoek lange termijn effecten gaswinning Waddenzee. Retrieved on 16/3/2022 from https://waddenvereniging.nl/pers/9986-schokkende-resultaten-onderzoek-lange-termijn-effecten-gaswinning-waddenzee.html

Waddenvereniging. (n.d., a). Bescherm de Wadden: stop gaswinning onder de Waddenzee. Retrieved on 5/10/2021 from

https://waddenvereniging.nl/onswerk/gaswinning/stopgaswinning/petitie

Waddenvereniging. (n.d., b). Doelstelling. Retrieved on 2/3/2022 from https://www.waddenvereniging.nl/vereniging/doelstelling

Waddenvereniging. (n.d., c). Nationale Postcode Loterij. Retrieved on 2/3/2022 from https://www.waddenvereniging.nl/vereniging/partners/nationale-postcode-loterij

WaddenZee.nl. (n.d., a). Partners. Retrieved on 7/10/2021 from 63https://www.waddenzee.nl/beheren/coalitie-wadden-natuurlijk/partners

WaddenZee.nl. (n.d., b). Samenstelling Omgevingsberaad Waddengebied. Retrieved on 12/4/2022 from https://www.waddenzee.nl/overheid/omgevingsberaad-waddengebied/samenstelling

WaddenZee.nl. (n.d., c). Sportvisserij. Retrieved on 12/10/2021 from https://www.waddenzee.nl/themas/visserij/sportvisserij

WaddenZee.nl. (n.d., d). Vergunningen. Retrieved on 8/3/2022 from https://www.waddenzee.nl/overheid/vergunningen

WaddenZee.nl. (n.d., e). Visserij met vaste vistuigen. Retrieved on 3/2/2022 from https://www.waddenzee.nl/themas/visserij/vaste-vistuigen

WaddenZee.nl. (n.d., f). Defensie. Retrieved on 2/3/2022 from https://www.waddenzee.nl/themas/defensie

WaddenZee.nl. (n.d., g). Overzichtstabel beheer. Retrieved on 16/3/2022 from https://www.waddenzee.nl/overheid/waddenzeebeheer/overzichtstabel-beheer

Waterschap Hunze en Aa's. (n.d.). Ons gebied. Retrieved on 2/3/2022 from https://www.hunzeenaas.nl/over-ons/ons-gebied/

Waterschap Noorderzijlvest. (n.d.). Kenmerken en overzichtskaart. Retrieved on 2/3/2022 from https://www.noorderzijlvest.nl/kenmerken-en-overzichtskaart

Watts, M. (2000). *Chapter 16: political ecology*. In Sheppard, E. (Ed.) & Barnes, T. J. (Ed.), "A companion to economic geography". Oxford: Blackwell Publishers Ltd.

Wetterskip Fryslân. (n.d.). Ons beheergebied. Retrieved on 2/3/2022 from https://www.wetterskipfryslan.nl/over-ons/wie-zijn-wij/ons-beheergebied

Wiebes, E. D. (2020). Brief van de minister van Economische zaken en Klimaat. Retrieved on 16/3/2022 from https://zoek.officielebekendmakingen.nl/kst-29684-213.html

Williams, S. & Doyon, A. (2019). Justice in energy transitions. Environmental Innovation and Societal Transitions. Vol. 31, 144-153. https://doi.org/10.1016/j.eist.2018.12.001

Yates, J. S., Harris, L. M., Wilson, N. J. (2017). Multiple ontologies of water: politics, conflict and implications for governance. Environment and Planning D: Society and Space. 0(0) 1-19. https://doi.org/10.1177/0263775817700395

--

Image front page: bildgebende_Momente. (2018). Watt Wadden Sea [photograph]. Pixabay. https://pixabay.com/photos/watt-wadden-sea-sandbank-north-sea-3397030/

Image chapter 1: picture taken by author

Image chapter 2: Elektro-Plan. (2014). Footprints steps Bristol [photograph]. Pxabay, https://pixabay.com/photos/footprints-steps-bristol-coast-ebb-284708/

Image chapter 3: picture taken by author

Image chapter 4: AlkeMade. (2019). Sea seals Wadden Sea [photograph]. Pixabay, https://pixabay.com/photos/seal-seals-wadden-sea-ameland-4446669/

Image chapter 5: analogicus. (2019). Mudflat Hike Watt Beach [photograph]. Pixabay, https://pixabay.com/photos/mudflat-hike-watt-beach-wadden-sea-4285877/

Image chapter 6: picture taken by author

Image chapter 7: picture taken by author

Image chapter 8: picture taken by author

Image chapter 9: fine_foto_art. (2021). Fishing Boat Nets Sea [photograph]. Pixabay,

https://pixabay.com/photos/fishing-boat-nets-sea-boat-shrimp-5903147/

Image chapter 10: Bernhard_Schuermann. (2022). Wadden Sea North Sea Coast [photograph]. Pixabay, https://pixabay.com/photos/wadden-sea-north-sea-coast-sea-7588901/

Annex 1: interview guide

[small talk]

Introduction

Introduce yourself

- Student international land and water management
- Master thesis research
- Own initiative, no commissioner

Research statement:

- What is the research about in short
- What would I like to know from the interviewee
- Interview takes around an hour
- Ask consent: can the interview be recorded, make sure they know they can stop at any time, ask questions, of whether the recording must be stopped etc. All answers are right: they are personal. Also say that I like to recognize the distinction between the interviewee's personal view and the view of the organization or company they work for.

Ask interviewee to shortly introduce themselves

Name, job, relation to the Wadden Sea

Interview

Start off with finding out about interests and imaginary

- What are is the first things that come to mind when you think of the Wadden Sea?
- What is the Wadden Sea for you? What does the Wadden Sea mean to you?
- What does the Wadden Sea mean to the organization you work for?
- What would the Wadden Sea look like in the ideal situation, according to you?
 - O What do you hope the Wadden Sea to look like in 10 or 50 years?
- What would the ideal Wadden Sea look like according to the company or organization you work for?
- Possible topics to touch upon (give as example): humans, ecological relations, infrastructure, finances, legal or administrative arrangements, culture.

Find out about strategy

- What do you do personally to work towards your ideal image of the Wadden Sea?
- What does your company/organization do to work towards their ideal image of the Wadden Sea?
- Possible topics to touch upon (give as example): humans, ecological relations, infrastructure, finances, legal or administrative arrangements, culture.

Introduce what legal personality is, who proposed this idea.

- Lambooy, van de Venis and Stokkermans build on the consultancy report of AT Osborne, in which it was stated that improvement goals for the ecology of the Wadden Sea have not been fulfilled, due to policy decisions.

- Lambooy, van de Venis and Stokkermans argue that the Wadden Sea should not be managed by the ministries, but rather by itself, to improve the effectiveness of management.
 - They propose to grant the Wadden Sea legal personality
- Legal personality means that entities can own assets (legally capable of owning property), to enter contracts, to file lawsuits, to hire employees and to appoint legal representatives.
- Mention that in several countries nature already has been granted rights.

Legal personality for the Wadden Sea: start off with an open view on how rights for the Wadden Sea should be arranged. In case the discussion needs to be fuelled: introduce the idea of a natureship

- In what ways would legal personality influence the organization or company the interviewee works for?
- Would the interviewee be in favour or against granting the Wadden Sea legal personality, and what are their reasons?
 - O What about the company or organization they work for?
- How would the company or organization want to position themselves in case the Wadden Sea would be granted legal personality?
 - o For example: what should their roles, duties, or freedoms be?

Conclusion

Ask if their name can be used: clarify how their names would be used

Ask if they would be interested in receiving the end product

Ask if they want to check the interview notes afterwards

Ask if they know other interviewees (prepare by looking which voices I still miss)

End with thanks

Annex 2: overview of the interviewees

[in this version removed for privacy reasons]

Annex 3: original quotes in Dutch

ⁱ Original quote: "het hele gebied is ingericht als garnalenkweekbak (...) en in een kale zandbak kan niks zich hechten, kan niks zich verstoppen: alle vis is weg" "boven water lijkt het heel wat, die Waddenzee, met al die vogels, plantjes en insecten, maar onder water is het helemaal niks"

ⁱⁱ Original quote: "[de Waddenzee is] misschien wel het belangrijkste natuurgebied van Nederland, ik zeg dat omdat het een van de gebieden waarvan je kan zeggen dat het het minst door de mens is beïnvloed. Ook daar is natuurlijk sprake van beïnvloeding, denk aan alle activiteiten die er plaats vinden, denk aan de afsluitdijk en alles, maar toch, Uitgangspunt voor dat gebied is laat het met verder met rust, processen moeten zo ongestoord mogelijk kunnen plaatsvinden, dat is het beleid, en dat is de inzet van iedereen dat geeft kwaliteit, dat geeft een bepaalde uniekheid, die ik heel special vind"

iii Original quote: "je bent nog steeds bezig met herstel en zo zeggen we dat ook, want we krijgen ook vaak voor de voeten je bent aan het tuinieren, met broedgebiedje zus, hoogwatervluchtplaats zo aanpakken, maar eigenlijk sinds de aanleg van de afsluitdijk is dat hele systeem gigantisch om zeep gegaan. Die natuurlijke Waddenzee met de ruimte die die nodig heeft om bij hoogwater en dergelijke zijn water kwijt te kunnen, sinds alle bedijkingen, stuifdijken boven de eilanden langs, de afsluitdijk, dat hele systeem is niet meer in een situatie dat kustvogels daar natuurlijk gebruik van kunnen maken"

iv Original quote: "We doen iets aan natuurversterking door het toevoegen van een element aan een gebied waarvan het kenmerk is dat het dat soort elementen niet heeft (ik bedoel we noemen windparken op de Noordzee, daar gaan we ook allemaal van die visstructuurdingen inzetten zodat daar vissen kunnen schuilen en dan zeggen we dat dat natuurverbetering is, maar alleen al de essentie dat je in de Noordzee hard substraat hebt waar iets aan vast kan gaan hechten...) dat is geen natuur, dat is tuinieren, en dat is prima, maar noem het dan tuinieren, want dat verandert in ieder geval de maatschappelijke perceptie naar een meer realistisch en eerlijker beeld van natuurbescherming"

' Original quote: "als je in het midden van de Waddenzee staat, op een plaat, en je ziet niks meer om je heen dan alleen het Waddengebied, dan worden mensen daar heel rustig van en die vinden dat toch echt geweldig, je ziet de horizon, je ziet de zon glinsteren in het water enzovoort... dit zijn momenten dat je mensen erop kan wijzen dat het er nu nog is, maar dat het kan verdwijnen door ons eigen toedoen. (...) Als ze daar dan van genoten hebben en ze komen terug thuis en er moet voor de tweede kamer gestemd gaan worden, politiek en dergelijke dan heb je kans dat ze zeggen 'zo ver moeten we niet gaan, dat beetje gas wat er nog zit...', dan moeten we de transitie van de energie op een andere manier versnellen"

vi Original quote: "als je de gebiedsagenda 2050 leest, het meest actuele document wat met alle stakeholders of betrokkenen van de Wadden is opgesteld, dan merk je dat het op meerdere gedachten hinkt: Alles moet maar kunnen, alles gaat parallel aan elkaar, en eigenlijk worden er worden helemaal geen duidelijke keuzes gemaakt, alles gaat maar door. Enerzijds staat er: bereikbaarheid van de eilanden en de havens houden we op peil, want dat is belangrijk voor toerisme, recreatie en economie, en anderzijds zeggen ze baggeren moeten we minder doen want dat is schadelijk voor de natuur. Hoe kunnen we dat verenigen, dat is een groot vraagstuk. Als je kijkt naar de totale ontwikkeling van het systeem (...) dan zullen we op een gegeven moment over de hele periode waarover dat plan gaat moeten evalueren is het überhaupt haalbaar wat jullie wat hierin hebben opgeschreven of niet, is het houdbaar of niet? En dat zal ertoe leiden dat we op een gegeven moment keuzes moeten maken. Want het gaat ergens wrijven, steeds meer schuren"

vii Original quote: "het is wel goed om te weten dat de overheid eigenlijk alles van zich afduwt dus de PKBs die we voorheen hadden, die voor veel bescherming zorgden denk ik, dat is nu helemaal gedecentraliseerd en naar provincies overgegaan, en daar waar provincies kunnen duwen ze het naar gemeenten af. (...) dat is in mijn beleving wel een achteruitgang geweest. Dat je dat soort grote documenten, waarbij de overheid de centrale regie op zich nam, dat was wel veel beter, in mijn beleving (...) dat daar de overheid, wel in samenspraak met allerlei stakeholders, maar dan komt er wel een centraal document, een PKB Waddenzee (...) als je dat soort documenten leest heb je het over beheerplannen waar iedereen zich aan dient te houden. Nu kan een provincie daar op allerlei manieren vanaf afwijken, als je ziet hoe gedecentraliseerd het allemaal niet is.(...) je het aan allemaal stakeholders overlaat de

Waddenzee te beschermen, naar mijn idee is de bescherming een stuk minder geworden (...) de totale regie is volledig weg"

- viii Original quote: "Soms is het heel erg goed willen beschermen misschien wel bedreigender en lastiger om iets voor elkaar te krijgen dan dat je het minder sterk beschermt maar met zijn allen ziet dat het belangrijk is. Dat vind ik nog wel een hele lastige, van als je het te star en te bedreigend maakt, dan kan je wel eens het averechtse effect hebben. Omdat je dan de mensen die aan de kant zitten die bedreigd worden niet meer in beweging krijgt. En dat is nu een beetje gaande heb ik het gevoel"
- ix Original quote: "Als tijdelijke maatregel kan er heel veel en zou er ook heel veel moeten kunnen (...) ik snap ook wel dat je niet direct een heel natuurlijk systeem terug hebt. Wat we nu gaan doen, is net buiten de haven van Den Oever, is een strekdam (...). Die was vooral om de golfoploop richting de haven te dempen. Dat is dus een basalt dam met asfalt erop. Daar broeden sinds een paar jaar lepelaars, en een van de vorige projecten, toen hebben we bedacht, op zo'n kunstmatige dam, als daar nu al lepelaars zitten, hoe kunnen we dat voor strandbroeders en bijvoorbeeld sterns (...). Dus als we nou tegen die strekdam broedgebied aanleggen, dan heb je een kunstmatig eiland, (...) Bij gebrek aan alternatieven juichen we dat toe. (...) Dus in die zin, als een overbruggingsperiode, hopen we, kan dat. Je kunt het ook te bont maken. (...) We moeten niet hebben dat je langs de hele Waddenkust overal pontons aanlegt als broedgebied: dat moet je niet willen. (...) Maar goed wat ons betreft kan er vrij veel. Maar we zeggen ook, tegen bijvoorbeeld l&W, LNV of Rijkswaterstaat, als jullie morgen een aantal stuifdijken doorbreken en zogenaamde wash-overs maken (...) dan is dat altijd beter. (...) moet je zoveel als mogelijk toch kunstmatig ingrijpen, want het is een kunstmatig systeem."
- * Original quote: "het [natuur] hoeft geen menselijk belang te hebben, het mag er gewoon zijn. het hoeft er niet te zijn, het mag er zijn. (...) de natuurlijke reflex als is om erover na te denken wat we er als mens aan hebben, zoals ecosysteemdiensten: ecosysteemdiensten is gewoon simpelweg hoe profiteren we er als mens van (...) zo kun je er allemaal menselijke functies aan ophangen. Ook dat vind ik een noodgreep: alsof je moet verdedigen waarom het [natuur] er mag zijn. alsof het een dienst voor de mens moet vervullen. En eigenlijk hoeft dat helemaal niet"
- xi Original quote: "Landschap hoort er natuurlijk ook bij, het is niet alleen natuur, het is ook landschap. (...) De Waddenzee is gewoon echt van zichzelf een monumentaal leeg landschap. Waar je alleen de vuurtorens ziet en een paar boompjes die boven de dijk uitsteken, maar goed we hebben dat landschap de afgelopen twintig jaar helemaal volgeknald met windturbines, en dat soort dingen. En daar moet eens een keer wat aan gedaan worden. (...) Het heeft te maken met inderdaad behouden van datgene wat het waardevol maakt, mensen komen naar de Waddenzee vanwege de rust, de ruimte en de natuur. En ja, een bedorven landschap is lang zo aantrekkelijk niet en economisch renderend als een mooi landschap waar mensen graag op afkomen. Dus ja, ik denk dat monumentale lege landschap daar moet je heel zuinig op zijn, en wat nu vaak gedacht wordt dat is dat bijvoorbeeld windenergie dat is dan goed voor het milieu, zet dat dan maar in de natuur, terwijl sorry, energieproductie dat is gewoon industriële productie van energie, dat hoort thuis op industrieterreinen, zoals de Maasvlakte, of delen van de Noordzee die je echt aanwijst als energieproductie gebied. Daar kun je dat doen, maar een natuurgebied moet je vrijwaren van die dingen, al is het maar omdat om elke windturbine het heel veel vogelslachtoffers eist. (...) Je kunt je landschap maar één keer verpesten."
- xii Original quote: "de Waddenzee is natuurlijk niet alleen maar een stuk natuur (...) Als niemand de Waddenzee nog kent, dan ja, waarom zou je dat dan beschermen. Ik denk dat je alle aspecten mee moet pakken. Op de eilanden wónen mensen, dat is gewoon zo, die wonen en werken daar, dat moet je meenemen. Het gaat erom dat je in de totaliteit, met alles wat er is... Kijk als je het menselijk lichaam neemt, daar zitten ook allemaal ongerechtigheden aan, nou ja, die zijn er gewoon, daar leer je maar mee leven."
- xiii Original quote: "En het is een werkgelegenheidsding he, neem een bedrijf als Heiploeg in Zoutkamp (...) het is wel een bedrijf wat werkgelegenheid biedt aan tussen de vier- of vijfhonderd mensen, nou dat is voor zo'n regio natuurlijk enorm. En dat compliceert het ook verder, het zijn wel over het algemeen de Waddengemeentes zijn over het algemeen krimpgemeentes, jongeren trekken allemaal weg naar de stad. En wat er zit dat zijn over het algemeen mensen met een praktijkopleiding of helemaal geen opleiding, veel ouderen, dus het zijn echt vergrijzende regio's die eigenlijk voor jongeren heel weinig aantrekkelijk zijn, omdat ze ook qua werkgelegenheid weinig opties bieden, en in sommige regio's is dat dus met uitzondering van de visserij. En dan kun je zeggen, ja,

wat zijn die scheepjes nou op de Waddenzee, wat stelt dat nou helemaal voor, maar voor dorpen als Den Oever (...), Zoutkamp, Lauwersoog, is de visserij echt van cruciaal belang als het gaat om het bieden van werkgelegenheid, om jonge mensen daar ook een toekomst te bieden"

- xiv Original quote: "En als natuurbeschermers hopen dat je met een rechtspersoonlijkheid verder kan komen, dan voorzie ik grote problemen, dan moet je dat allemaal opnieuw bevechten en ik denk dat je geen steek verder komt (...) je stuit op hetzelfde systeem, en je zou eigenlijk moeten weten, stel je zou toch de Waddenzee toch een rechtspersoonlijkheid willen maken, dan zou je eigenlijk moeten weten welke dingen voorstanders willen verbeteren (...) en de grote dingen die dan beter zouden kunnen dat is dan de mosselcultuur en de garnalenvisserij, ik denk dat dat de grote dingen zijn (...) maar dan blijft het een interessant idee"
- xv Original quote: "en ik denk dat dat probleem meer een probleem is van hoe er met de Natura2000 doelen systematiek word omgegaan en hoe de bewijslast ligt bij het aantonen van een significant negatief effect en vervolgens ook nog het voorzorgsprincipe (...) dus zowel culminatie als evidenscriterium als het omgaan met het voorzorgsprincipe samen dat loopt op dit moment zodanig dat er eigenlijk meer mag aan activiteiten dan in mijn ogen goed is. en dat zijn problemen waarvan ik wel vind dat ze opgelost moeten worden om de waarden van de Waddenzee goed te beschermen, maar of dat moet door middel van een rechtspersoonlijkheid van de Waddenzee of dat je gewoon de wetgeving rond Natura2000 moet verbeteren. Dan heb ik het idee dat het laatste eigenlijk eenvoudiger is en dichter zit bij hoe het echt werkt, omdat uiteindelijk Natura2000 doelen ook doelen zijn die we als mens toekennen, en dat doen we zo goed mogelijk (...) maar toch denk ik dat we moeten erkennen dat wij dat bedenken"
- xvi Original quote: "stuk voor stuk wordt het allemaal getoetst in Natura2000 beoordelingen, maar voor natura2000 beoordeling kan heel erg veel, want voor je een significant effect ergens op hebt moet je het wel gek maken! Ik denk ook dat op die manier, brokkelt het gewoon steeds verder af dus ja ik denk dan, in die zin zou het wel goed zijn om naar een alternatieve werkwijze te zoeken die iets stelliger is en wat mensen minder tegenover elkaar zet, en de belangen van mensen niet behartigd maar die van dat ecosysteem."
- xvii Original quote: "je zit in een heel ingewikkelde positie op het moment, want er zijn ook weinig mensen die bereid zijn een stapje terug te doen. (...) en dan zou het denk ik handig zijn als je een club hebt die gewoon hét belang van het Wad behartigd: en dan ook gewoon van: dit willen we ermee, en we zijn wel bereid concessies te doen als we dit ervoor terug krijgen. Dan wordt het een ander soort spelletje als nu op basis van hele strakke starre natuurregels, waar eigenlijk gewoon, als je het heel strak leest 'er kan niks, tenzij je compenseert', en als je geen ruimte hebt om te compenseren, kan je dus niks."
- xviii Original quote: "dieren worden nog steeds gehouden en geslacht, ook al hebben ze een bepaalde mate van rechten, en een boer kan, als puntje bij paaltje komt (...) zelfs onteigend worden, als de Waddenzee een persoon zou zijn en er zou een dringend maatschappelijk belang zijn dan zou je de WZ nog steeds kunnen onteigenen (...) dus het is niet zo dat het met objecten of dieren of mensen met rechtspersoonlijkheid per definitie niets ergs meer gebeurt"
- xix Original quote: "volgens mij is niet alleen de vorm bepalend, maar ook de werkelijke intentie van iedereen om aan de natuurdoelen een grotere waarde toe te kennen, en ook bereid zijn om daar grotere consequenties aan te verbinden"
- xx Original quote: "ik heb er wel een iets andere kijk op, en dat is met name allerlei ellende die op je afkomt. Als je rechtspersoon bent, dat is vrij nieuw, dat betekent dat er weer een ongelofelijke hoeveelheid rechtszaken zal gaan plaatsvinden, waaronder heel veel rechtszaken die gaan alleen maar om jurisprudentie te kweken. Althans, dat is de ervaring die ik op een heel aantal dossiers ervaar. En dat is nou niet bepaald iets waar ik op zit te wachten. Vanuit de Waddenzee kan ik het me wel heel erg voorstellen, maar wat vanuit de Waddenzee de consequentie zou kunnen zijn is dat de ervaring van vier jaar onderzoek in de Waddenzee naar verstoring, waaruit blijkt dat recreatieve verstoring een van de grootste verstoringsbronnen is, als dan de consequentie is dat zij de recreatie wil laten verminderen in de Waddenzee, dat klinkt spannend, eerlijk gezegd. Dan hebben wij er denk ik als defensie ook mee te maken, maar waar ik het meest tegenop zie is... het idee is zo gek nog niet, maar met name die juridische hoos aan rechtszaken die je in het begin zal krijgen vind ik een lastige. Daar kan ik me nog de komende 10 jaar mijn tijd mee vullen dan, en ik weet niet of ik daarop zit te wachten als niet-jurist zijnde."

zwi Original quote: "je kunt ook redeneren van ja we hebben een bepaalde bedoeling rondom die Waddenzee, we zien dat er dingen achteruit gaan. (...) Je kunt ook zeggen dat de politiek daar veel meer aandacht voor moet hebben, en dat we dus gewoon veel meer energie moeten stoppen in het uitvoeren van maatregelen die ervoor zorgen dat het de andere kant op gaat. (...) je kunt alles juridificeren maar uiteindelijk gaat het ook om politieke wil, (...) en hoeveel geld heb je ervoor over, wat willen we op zijn kop gaan zetten om het te verbeteren. Het kan zijn dat de juridische invalshoek een soort aanjager wordt, maar het hoeft niet. Als voorbeeld de discussie rondom de kabelaanleg door Schiermonnikoog heen vanuit de Noordzee daar heb ik ook het idee van nou, het begint nu een beetje te kantelen (...) uiteindelijk merk je dat kantelen komt niet zozeer door de juridische invalshoek, maar vooral door genoeg lawaai maken, dat maakt dat er ineens toch wat gaat schuiven. En het lawaai maken wordt echt niet ingegeven door juristerij, maar voornamelijk door de bewoners van Schiermonnikoog (...) En als je maar hard genoeg roept, dan gaat er wat schuiven, en dat werkt minstens zo goed denk ik"

xxii Original quote: "Christa: denkt u dat het realistisch is om een stuk natuur rechtspersoonlijkheid te geven, binnen bijvoorbeeld nu en tien jaar? Lenze: ja hoor, ik zou niet weten waarom niet. Ik denk dat het helpt, en dat iedereen er beter van wordt. Christa: en de politieke wil, gaat die het toestaan? Lenze: politieke wil kun je creëren, dat kun je met elkaar creëren. Dat is dan gewoon ook weer zaak van goed samenwerken, gewoon zorgen dat de organisaties die voor de natuur staan, dat die hier samen in optrekken, maar ook dat ze samenwerken met andere instellingen en organisaties die graag duurzaam over willen komen. Zoals bijvoorbeeld de Waddenhavens, die zijn natuurlijk economisch heel belangrijk. Ik ben ervan overtuigd dat de havens het prima vinden als de Waddenzee beter beschermd wordt en rijker wordt, dus het zou zomaar kunnen, zolang zij niet bang hoeven te zijn dat zij in hun voortbestaan bedreigd worden, denk ik dat ze graag zouden meewerken hieraan. Dat moet je met elkaar goed formuleren. Ik denk dat het goed kan, dat het een kansrijk concept is, en ik steun het van harte."

^{xxiii} Original quote: "daarnaast ligt toch een belangrijke sleutel in hoe er politiek bestuurlijk met natuur wordt omgegaan, omdat je behalve een goede wetgeving heb je uiteindelijk ook politiek bestuurlijke wil nodig hebt om die goed toe te passen (...) misschien moet uiteindelijk moet de Waddenzee meer in het hoofd en het hart van mensen zitten dan dat je de oplossing in de Waddenzee zelf, [zoals met] rechtspersoonlijkheid, buiten die mensen moet leggen, omdat uiteindelijk de mensen zelf die moeten de Waddenzee beschermen, dat kan de Waddenzee zelf niet (Christa: en hoe komt de Waddenzee in het hoofd en hart van de mensen?) ik denk dus niét door de Waddenzee rechtspersoonlijkheid te geven, maar ik denk dus door te erkennen dat de Waddenzee heel belangrijk is voor iedereen"

xxiv Original quote: "We hebben in Nederland (...), we hebben een democratie (...). Via die democratie kiezen wij als burgers mensen die ons vertegenwoordigen, dus in principe mag je ervan uit gaan dat het provinciebestuur een vertegenwoordiging is van mensen die daar wonen en leven en werken, en dat het landelijke bestuur een vertegenwoordiging is van mensen die in Nederland wonen en leven en werken (...) Maar in principe hebben we dus een model waarin we in het richting geven aan beleid er een afspiegeling is van hoe het volk denkt, nou dat is mooi want dan zouden we in principe met die beleidsmakers heel afgewogen keuzes kunnen maken over wat we wel en niet in een gebied willen want die mensen die weerspiegelen ons, maar naast die beleidsbepalers, dus de bestuurders, hebben we ook nog lobbyverenigingen, we hebben heel veel natuurorganisaties, we hebben ambtenaren met een bepaalde passie of feeling voor bepaalde onderwerpen die toch stiekem graag wel zien dat er iets gerealiseerd wordt onder hun termijn. Waar je begint met een vrij clean democratisch model van wat reflecteert aan wat het volk wil, eindigt het toch in een soort van getouwtrek wat meestal neerkomt op wie heeft het meeste geld, en wie schreeuwt het hardst, en wat tegenwoordig heel bepalend is: wie heeft juridisch gezien het meeste gelijk. (...) wat je nu ziet gebeuren, dat wat bijna nog belangrijker wordt, is dat als er beslissingen genomen worden, dat er meteen ergens een paar beroepsproceduurders zitten rond te kijken, van oke, is dit juridisch correct (...). Je merkt dat beleid nu, in plaats van dat het gaat om wat willen we nu eigenlijk met het land, dus die gekozen volksvertegenwoordigers, wat is het hun visie, en wat is het belang daarin te borgen, verschuift het heel erg naar hoe zorgen we ervoor dat we geen rechtszaak krijgen. Dat is een totaal andere manier van besturen. Daarin speelt mee dat je (...) zorgt dat juridisch alles helemaal waterdicht is. Maar dat betekent niet dat je continu op zoek bent naar de beste oplossing, maar dat je continu op zoek bent naar de veiligste oplossing, waarbij de veilig niet het meest gebalanceerd is, maar veilig is wat het minste gezeik oplevert. En dat kan heel gevaarlijk zijn want daardoor richt je je in principe naar degene die mogelijkerwijs het meeste gezeik kunnen veroorzaken. En ik denk dat in de Waddenzee men heus wel zijn best doet om er op een gebalanceerde manier uit te komen, maar het is wel een continue worsteling waarbij je als stakeholder bijna gedwongen wordt om mee te gaan (...) in plaats van dat je gaat denken, hoe kom je er samen uit, op een gegeven moment ben je bezig met hoe zorgen wij ervoor dat wij ook een partij worden waar ze rekening mee gaan houden, en als het antwoord is ze houden alleen maar rekening met je op het moment dat je moeilijk gaat doen, dan ga je als partij dus zo hard mogelijk moeilijk doen"

vivi Original quote: "wat mij vasthoud, nu even een creatieve vorm die in mijn hoofd springt, in lijn met denk ik wat wij allebei heel erg omarmen, de gedachtevorm dat je kan praten met de Wadddenzee. Dat is niet dat de Waddenzee jou gaat vertellen wat wel en niet mag, maar de Waddenzee stelt jou in een gesprek allerlei vragen, reflecteert, spiegelt, wat jij van plan bent en stelt alleen maar vragen. En de Waddenzee zelf hoeft het antwoord niet te horen maar de gedachtes die jij over die vragen vormt, daartoe ben jij dan verplicht, laten we dat dan zeggen he, (...), en dat je ergens verderop nog een keer een juridische stok nodig hebt om iets te verankeren om iets per definitie niet te laten gebeuren, dat zou in een ideale wereld, als je het nodig hebt moet je het dan dus nog doen, maar in een ideale wereld zou je het niet eens hoeven hebben. (...) dit is de vorm die mij nu even vasthoud, wat wij anders zeggen dan dat het een juridisch, 'het mag wel of het mag niet', een soort binair afwegingsysteem is, nee, het is in de kern een fundamentele dialoog van wat je in zo'n gebied zou kunnen, wat misschien kan, wat misschien niet hoort, en jou alleen maar triggert, (...) dan wordt die anders"

vervolgens te kijken hoe we die netwerken en alles wat we dan maar nodig hebben om als mens nu te kunnen floreren maar ook nog in de toekomst, en (...) de vorm waarin we onze behoeftes vervullen gaan we daarop aanpassen. En dan kom je op dat woord aanpassen, wat volgens mij de natuur ons sowieso leert, (...) de natuur past zich wel aan: dus de vis gaat dood en de schorpioen komt terug, ik zeg maar wat. In het hele heelal past alles zich aan door de meest grote natuurkrachten die er maar denkbaar zijn, maar eigenlijk hebben we ons daar als mens behoorlijk aan zitten te onttrekken. We zien onszelf ook niet meer als natuur, maar we denken vanuit een soort dominant maakbaarheidsdenken, en zijn op die manier bezig met de economie, met onszelf, en ja, ook een beetje de natuur. Maar niet als het ons te veel in de weg zit. Dus dat andere discours, daar ben je dus mee bezig, en of de vorm juridische entiteit helpt of niet, daar heb ik niet zozeer een mening over, het klinkt heel goed he, maar het kon ook nog wel eens de omgekeerde werking hebben omdat ergens toch... Die positie van de natuur zal door mensen moeten worden verwoord in de besluitvorming, in de juridische wereld, en daar ergens heb ik nog even de connectie niet helemaal. Dus ik vind het een hele mooie en ook spannende denkexercitie."

xxvii Original quote: "ik heb ooit van een jurist (...) geleerd dat het juridisch regelen de laatste stap is die je toepast om bepaald gedrag, of een bepaalde manier van doen af te dwingen. Als je dat bij een straat bekijkt, het plaatsen van een verkeersbord, een juridisch geldend bord, doe je echt pas op het eind, want je probeert met de infrastructuur, met de vormgeving het juiste gedrag eerst af te dwingen. En pas als laatste redmiddel zie je de juridische kant voor je."