

# The Battle of the Norwegian Coastline:

A Study on Development of the Norwegian Coastline and its Impact on Public Access and Biological Diversity, exemplified with the Case of Hvaler

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Master Thesis 30 credits 2010



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**Declaration**

I, Pål-Magnus Rybom, declare that this thesis is a result of my research investigations and findings. Sources of information other than my own have been acknowledged and a reference list has been appended. This work has not been previously submitted to any other university for award of any type of academic degree.

Signature.....

Date.....

## **Acknowledgements**

I would like to thank my informants who provided me with insightful information and data throughout this thesis:

The County Governor's Office: Geir Gartmann & Ole Martinsen.

Hvaler Municipality: Anna Auganes, Torleif Gjellebekk and Bernt Erik Larsen.

Naturvernforbundet: Pål Bugge & Arild Ådnem.

Hvaler Cabin Union: Gunnar Dahl-Johansen and the anonymous cabin owners.

Østfold Botanic Union: Jan Ingar Båtvik.

Hvaler Fisher Union: Jan Gunnarsen and the anonymous fishermen.

I would also like to thank fellow students Helén Johanne Andersen, Tor-Gunnar Olsen and Jon Ivar Berg for tips and help during the writing process.

My supervisors for this thesis have been Thor S. Larsen and William Derman.

## Abstract

For the last 40 years or so, the coastline southeast of Norway has changed dramatically when it comes to biological diversity, public access and esthetic appearance. Many of these less fortunate changes reflect a changing society, which now focus on development and privatization.

The coast is an enormous recreational resource, visited annually by tens of thousands, but as coastal development and growth continues, public access to these areas decrease. As a result, conflicts arise between coastal developers, private property owners, environmental organizations and the authorities where one side seeks to promote further development while the other fights for the protection of public access to the coastal shores and different fragile species that reside there.

In 1965 the Norwegian Government passed a legislation which prohibited further building activities from the water line and 100 meters into the land (the 100-meter belt). However, in order to uphold the individual municipality's autonomy, it is possible to exempt from this law through dispensations or through regulations plans within municipality plans. The County Governor and the central government has the possibility to interfere with exemptions that conflict with Norwegian national guidelines and values, but research has led to believe that many county governors in Norway seldom use such measures.

This master thesis seeks out to explore why and how there has been increased building activity since the national legislation against building within the 100-meter belt in 1965 and furthermore explore the effects on biological diversity and public access. In order to investigate these issues the author has explored different pressure groups that either oppose or support such coastal development with attempts to determine their actual influential attributes by analyzing coastal legislations and institutions, and through relevant fieldwork.

The Hvaler archipelago, one of the most popular cabin communities and coastal recreational areas in Norway has been used as a case for this thesis.

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## List of Abbreviations and Acronyms

CBD	Convention on Biological Diversity
CG	Østfold County Governor
EEA	European Economic Area agreement
HM	Hvaler Municipality
LA 21	Local Agenda 21
LNF-areas	Agriculture, nature and recreational areas (“Landbruks-, natur- og friluftsområder”)
NGOs	Non-governmental organizations
OF	(“Oslofjordens Friluftsråd”)
PBLn	The Plan and Construction Act
RPR-O	The national political guidelines for the Oslo fjord
UN	United Nations

## 1.0 Introduction

This master thesis concerns coastal development at the Hvaler archipelago, and what the effects are on public access and biological diversity. Hvaler Municipality is situated southeast of Norway and mainly consists of seven islands: Vesterøy, Spjærøy, Asmaløy, Kirkeøy, Herføl, Northern and Southern Sandøy. Kirkeøy is the Island with road connection that lies the farthest to the south. Herføl, Northern and Southern Sandøy are only accessible by boat. The Mainland roads to the western Hvaler islands were opened in 1971 followed by the construction of the Hvaler Tunnel 20 years later, which made the island cluster more accessible to human influence.

Since the national Plan and Construction Act in 1965, which stated that construction of private facilities within the 100-meter belt<sup>1</sup> were to be prohibited, there has been increased building activity within the 100-meter belt, which raises questions as to how effective the system which is supposed to protect public access and the environment really is.

Decentralization of power from the central to the local government has resulted in increased acceptance of building activity in the coastal zones and the idea of the study is analyze why this is so, and discover what role the complaint system has in practice for these activities. In addition there are different pressure and lobbying groups that influence Hvaler Municipality's and the County Governor's decisions. This thesis will identify these pressure groups and determine the role they play when it comes to building activity within the 100-meter belt.

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<sup>1</sup> 100-meter belt: Basically the area that stretches from the sea line and one hundred meters into the land.



**Figure 1.** Entering Hvaler Municipality (Photo: Pål-Magnus Rybom 2009).

The Hvaler archipelago, southeast of Norway, is a particularly popular area for human recreational activities as well as containing a rich and varied biodiversity, due to its warm climate. Some of the most threatened plant species in Norway reside in Hvaler, creating significant challenges for the municipality when it comes to the balance between environmental protection and promoting commercial business. It becomes apparent that a conflict of interest occurs, as Hvaler municipally is on one hand dependent on tourism and has on the other hand an obligation to protect biodiversity. Area intensive development and intervention may conflict with sustainable use and conservation of biological diversity, whether it be large individual projects or the sum of smaller ones. The Norwegian authorities state that the goal is that all authorities with responsibility for land encroachment take biodiversity into consideration when it comes to the design of policies, regulations, plans and actions. On a long-term basis, there should be facilitated good systems for reporting the extent and nature of intervention in vulnerable areas (St. mld.nr 42 2000-2001).

The coast is an enormous recreational resource, visited annually by tens of thousands, but as coastal development and growth continue, public access to these areas becomes more and more decreased. As a result, conflicts arise between coastal developers,

private property owners, environmental organizations and the authorities were one side seeks to promote further development while the other fights for the protection of public access to the coastal shores and different fragile species that reside there.

### **1.1 Research objectives**

The central questions, which will be researched in this thesis, are as following:

1. What are the reasons for the increased development and building activity within the 100-meter belt at Hvaler?
2. What are the effects on the public access and biological diversity?

This thesis has looked into the national policy and legal regulations to strengthen public access to the coastal zone within Hvaler municipality. In addition the thesis studied the relationship between Hvaler municipality (HM) and the County Governor (CG) with regard to the Governor's complaint opportunities in building within the 100-meter belt. The thesis also focuses on data received from interviews with the different pressure groups and stakeholders involved in order to gain a greater understanding of the opinion of these groups and also estimate what kind of influence they have over policy making.

### **1.2 Stakeholders**

The thesis explored different pressure groups and stakeholders and their ability to counter-act HM and the CG's decisions. Coastal policy and its outcomes clearly are the results of political processes where different interest groups compete for influence and resources. Coastal zone management is consequently a result of interplay between these groups.

The stakeholders/pressure groups I have chosen to analyze for this thesis are:

- Hvaler Municipality
- The County Governor
- Private property owners (cabin owners)
- Environmental organizations
- Fishermen

However the total amount of stakeholders concerning coastal zone management is much larger than this. It includes all people that have some kind of relation to the

coastline, whether they spend time at the coast relaxing, fishing, camping or whether they are property owners or have their livelihoods there.

### 1.3 Description of the Study Area

The municipality of Hvaler is about 86 square kilometers (km<sup>2</sup>) and has a population of 3700. Consisting of approximately 4700 cabins, Hvaler municipality is one of the largest summerhouse (cabin) communities in Norway. More and more of these cabins



**Figure 2.** The Hvaler archipelago: Vesterøy, Spjærøy, Asmaløy, Kirkeøy, Herføl, Nordre and Søndre Sandøy (<http://hvaler.net/innhold/fakta/hvalerkart.asp>).

are now linked to the water and sewer system, which makes the island paradise even more attractive and results in longer seasons. During summer the population increases from approximately 3700 to almost 35000 which gives an indicator on how immensely popular Hvaler is when it comes to tourism and contribution to commercial business in the area (Andersen et al 2006). The majority of the cabins

found at Hvaler are private owned and are most commonly used by the owners and their families. However, the amount of “time-share” and rental cabins found in areas like “Havtunet”, “Gamberget” in Utgårdskilen or “Skjærhalden Rorbuer” has increased. In addition a significant portion of private cabins are rented out through (“Hvaler Hytteformidling”) (ibid).

The Hvaler archipelago is an important area when it comes to a large range of recreational activities. Examples of these recreational activities are swimming and sun-bathing, walking, running and bicycling on roads and paths, boat activities consisting of fishing, hunting, diving, sightseeing and more specialized activities like windsurfing and kiting.

## **2.0 Conceptual Background**

### **2.1 The Norwegian Mentality**

An important part of the Norwegian cultural heritage is the opportunity to be out in the open country. Through centuries Norwegians have had the right to go almost everywhere they desire, should it be woodland, mountains, on lakes, forests, along the coastlines, unless e.g. fenced off as agricultural land, and irrespective of who owns the area. This public right to access was confirmed in the Outdoor Recreation Act of 1957. All such access must take place with consideration so that wildlife is not threatened, damaged or disturbed. Even though there are Norwegian laws securing the right of passage in coastal areas such as the 100-meter belt, the on-going struggle for the expansion of private property rights makes the actual access to beach areas quite limited, as development continue in spite of the building prohibition.

25<sup>th</sup> of June 1965 the Norwegian parliament approved a regulation that prohibited general construction activities within the 100-meter belt. This regulation was then taken into the legislation of planning and construction 14. June 1985 (Riksrevisjonen 2002). The reasons for implementing the regulation was to protect public access to beach areas and generally shield areas closest to the sea from general building activity. However, it is written in the legal documents that certain exceptions can be made within each municipality’s building plans and regulated areas. In addition, a municipality may grant dispensation from the law in some cases. These exceptions are made in order to maintain local governance and individual landowners rights (ibid).

This might be one of the most important policy dilemmas in contemporary coastal management –determining the appropriate balance between government policy regulations of coastal areas, and the sanctity of private property.



**Figure 3.** A local dealer in building materials states: Hvaler: -Everything you need in building materials for cabins and repairs. Cottage plots can be obtained. This commercial was used prior to the law of 1965 and shows how easy it was to build cabins at Hvaler in the past (photo: Pål-Magnus Rybom 2009).

The Outdoor Recreation Act of 1957 and the Plan and Construction Act of 1965 (PBLn) are together what functions as the foundation of protection against further building activity within the 100-meter belt. However, the Hvaler Islands also harbor some of the most threatened plant species in Norway, thus other acts such as the Conservation Act 1970 come in to play. The most essential acts for this thesis will be discussed later.

Despite of these acts, there has been extensive mapping of building activities within the coastal municipalities of Østfold (where Hvaler is included), Oslo, Akershus, Buskerud, Vestfold, Telemark and Aust-Agder. Statistics show that 8100 private constructions between 1982 and 1999 were approved in the 39 coastal municipalities.<sup>2</sup> It is also revealed extensive building activity in the period 1994-1999 compared to 1982-1987, which tells us that building activity is increasing (ibid).

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<sup>2</sup> “Riksrevisjonen” in Dokument 3:7 states that aerial photos taken to obtain these data cannot differentiate between new buildings (cabins and houses) and additional construction made on already built cabins and houses



The National Audit Office (“Riksrevisjonen”) has uncovered major differences between municipalities and how strict they have been with regards to handing out dispensations to the private sector. According to their document on building activities within the 100-meter belt (Riksrevisjonen 2002), there has been discovered poor judgment in many of these cases, mainly believed to be a result of lack of knowledge when it comes to the municipality’s decision-making.

## **2.2 The Right of Access and Recreation**

Outdoor recreation is an important aspect of the Norwegian culture where the main target is the access to and experience of nature and its positive impact on people. The Norwegian government came up with this definition in the 70s: “*Outdoor recreation is physical presence and activity in the outdoors at ones spare time with intentions on gaining an alternative nature experience*” (Direktoratet for Naturforvaltning 2001b: 6).

The Outdoor Recreation Act was legislated in 1957, and was created in order to:

- Preserve natural outdoor recreational activities and safeguard peoples right to passage to nature and
- To promote outdoor recreational activities as health bringing and environmental friendly actions (ibid).

Thus these definitions are not only about the activity itself, but in which environment the activity is situated, what experiences the partaker gain, and finally what effects the activities have on the partaker and the environment. Outdoor recreational activities construct social connections, and research has documented connections between physical activity and health (Direktoratet for Naturforvaltning 2001a). Outdoor recreational activities have also had positive effects on psychological suffering and drug addiction (ibid).

Furthermore, outdoor recreational activities result in general increased knowledge about nature and culture and thereby contributes to an increased general environmental awareness among people. In fact, these arguments were included in the report from the Brundtland Commission as necessary when it comes to sustainable environmental management (St. meld. Nr 46 1988-89). Moreover the Soria Moria declaration, which is the political platform for the governmental cooperation between

the Norwegian political parties: “Arbeiderpartiet”, “Sosialistisk Venstreparti” and “Senterpartiet” from 2005-09, emphasizes the importance of outdoor recreational activities further: *“There must be a principal rule that our own generation has a responsibility to give future generations the same access to nature that we have. Fewer areas remain untouched by technical intervention, and we must focus on a stronger protection of areas and nature qualities that our future descendants have the right to experience* (Regjeringen 2005: 53). Thus the right of access is the foundation of outdoor recreational activities and must be held strong within the juridical system and peoples general opinion.

According to the Soria Moria Declaration, the Government will:<sup>3</sup> (ibid: 54)

- Grant more money in order to buy attractive recreational areas and beach areas for public usage
- Ensure that public access, outdoor recreational activities and cultural heritage are safeguarded when the Norwegian army and the coastal authorities divest areas with attractive coastal areas, and that the most important ones stay in public ownership
- Stop building activity within the beach zone<sup>4</sup> (“strandsonen”). There is to be created a stronger geographical differentiation when it comes to guidelines in order to improve protection in areas where competition for the beach zone is high
- The juridical support scheme to municipalities that are in need of legal support with regards to protection of the beach zone are to be reinstated<sup>5</sup>

The first bullet point above means that in order to protect vulnerable outdoor areas from commercial industry or private ownership that degrades or destroys future possibility to enjoy outdoor recreation, the state can safeguard these areas by buying them or regulate them as public areas. The second bullet point evolves around the fact that in many cases the military has no longer use of large areas previously used

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<sup>3</sup> This list originally contains issues of both public access and biological diversity. However only issues concerning public access will be listed here

<sup>4</sup> The beach zone (“strandsonen”) is similar to the 100-meter belt, but stretches 300 meters instead of 100.

<sup>5</sup> This list was translated from Norwegian to English by the author

for military activities. In many cases these areas have great recreational value for the public, thus making it important to secure public access there. The third bullet point seeks to reduce privatization of the beach zone and the 100-meter belt in coastal municipalities in Norway. This is the key essence of this thesis and will be discussed at a later point. The fourth point above refers to the beach zone project that was implemented by the state in the year 2000. The project's main goal was to help coastal municipalities to maintain the right of access in the beach zone and 100-meter belt. One of the goals for the project was to strengthen juridical competence, hence giving the municipalities free legal support by legal representatives that were specialized in the field of coastal development (Direktoratet for Naturforvaltning 2001c). Due to the immense pressure from lawyers hired by private actors, such legal support could help the municipalities to resist some of this pressure.

Outdoors recreational activities are an important part of social politics and the society with relevance to healthcare, education, environmental management and commercial activity. Thus it is important for the Norwegian government to guarantee, strengthen and support the population's ability to enjoy the outdoors.

### **2.3 Coastal Legislation**

This sub-chapter will study the general laws that function within the coast and the 100-meter belt and the institutions that uphold them.

Norway's shores are a scarce resource and in need of protection. A general law against building within the 100-meter belt was introduced in 1965 and further developed in 1971 through the Beach Planning law (Riksrevisjonen 2002). Nevertheless, a total prohibition of building within the 100-meter belt would act against landowners' rights and the individual municipality's right for self-government. Thus there are certain exemptions from the no-building laws that generally complicate the setting. This chapter will go deeper into these exemptions as well as the different laws that protect the shores of Norway from building activity.

The land use on the coast of Norway is first and foremost regulated through the municipality plan in accordance to the Plan and Construction Act (PBLn 1985). However, there are additional laws that can regulate the building activity in these areas, which will be taken into consideration for this thesis. These additional laws are: the Conservation Act (1970), the Cultural Heritage Act (1978) and the Outdoor

Recreational Act (1957). Although there exist more laws that deal with coastal land use and planning, I have concentrated on the four legislations situated above.

### **2.3.1 The Plan and Construction Act of June 1985 No.77**

This law may be considered to be the most important when it comes to building activity within the 100-meter belt and coastal land use. The reason for implementing this law was that it would function as a guideline when it comes to cohesive planning and cooperation between the state, the counties and the municipalities. This planning and cooperation is to be the foundation of the decisions on the use and protection of resources, building and secure esthetical values. Through planning and by demanding special consideration to each and every building project, the law is created in order to result in land use which come to benefit individuals and the society as a whole (PBLn §2).

In many cases, the prohibition in PBLn is most evident in areas within the municipality that has been set aside for agriculture, nature and recreational purposes (LNF-areas). These areas are a part of the municipality plan's land use section and illustrated in maps. As a main rule, these areas can only be subjected to building activity that is directly related to agriculture.

The 100-meter belt is protected through §17-2 in the PBLn. This paragraph states that buildings, constructions, fences etc cannot be constructed within 100-meters from the shoreline (PBLn 1985). This prohibition accounts for buildings like houses, summerhouses, piers, bridges, outhouses, boathouses and more. In addition the paragraph forbids structures that reduce general passage (public access); like fences. The main rule in the acting law is that there is not to be any building activity within the 100-meter belt: (Law of Planning and Construction (PBLn) § 17-2 "*Buildings, constructions or fences cannot be constructed closer than 100-meters from shoreline (...)*") (PBLn 1985). However there are certain exemptions from the law in order to maintain landowner's rights and municipalities' rights for self-government.

Hvaler Municipality has old established buildings within the 100-meter belt, which may be of great importance when it comes to nature and recreation areas. For planning functions, it can be questioned if these areas should be mapped in the municipality plan's land use section as LNF-areas or as a building area for existing buildings. This decision may have large consequences because if such areas are

decided to be defined in the municipality plan as building areas for existing buildings, it results in exemption from the building restriction in PBLn § 17-2. Thus by mapping these areas as LNF-areas, these areas are submitted to the PBLn §17-2 and are better protected from building activity (DN 2002). This shows exactly how PBLn §17-2 gives room for exemptions in order to establish the right of landowners and self-government for the municipalities. Furthermore PBLn opens up for exemptions when an area is densely populated. This generally means an area where multiple buildings and structures are positioned, so that by adding to that cluster of structures will not decrease the right of access nor cause significant destruction to biological diversity. Nevertheless, by adding additional structures to such clusters will result in a decreased amount of usable square meters within the 100-meter belt.

Other possible exemptions from the PBLn are: Building purposes within the agriculture or fishery sector, if the Ministry of Defense is in need of areas, and if areas can be used for petroleum development (Hvaler Kommune 2004).

### **2.3.2 Building by Municipality Plans**

The prohibition of building activity within the 100-meter belt can be exempted through municipality plans. The Hvaler municipality plan's areal section states that:

The areal section shall (after PBLn §20-4) place:

1. Building Areas
2. Agricultural, nature and outdoor recreational areas (LNF-areas)
3. Areas for petroleum development
4. Other areas which are or shall be impounded for other purposes through this or other laws, and areas for defense purposes
5. Areas for special use or protection of the marine and waterways, including right of access, fishing, aquaculture-, nature and outdoor recreational areas
6. Important parts of communication systems (Hvaler Kommune 2004:2).

Through the establishment of these six points, the municipality may open up for building activity within the 100-meter belt should they choose so. For example the first point in PBLn §20-4 mentioned above opens up for building activity within the 100-meter belt through regulation plans.

Regulation plans are created for areas that are already taken into the municipality plan for building purposes. Permission for starting larger construction and development sites in accordance with § 93 in the PBLn, cannot be granted until there exist a regulation plan. The municipality is to inform stakeholders that will be affected so that they can make their comments within reasonable time. The case might also be introduced to the county municipality and state organs (“fagmyndigheter”) that may have special concerns for the area in question (Riksrevisjonen 2002).

When a sketch of a regulation plan is ready, it will be submitted for public inspection. After public review the permanent board of plan cases (“faste utvalg for plansaker”) process the case. The now finished regulation proposal is then submitted to the municipality board. If the municipality board is in disagreement with the proposal, it can be sent back for further processing. If there are objections to the regulation plan by the county municipality, neighboring municipalities or state organs (“fagmyndigheter”) the case will be submitted to the Ministries for a final decision (ibid). The municipality board’s final decision in cases of regulation plans can be subjected before complaint to the Ministry of the Environment. The Ministry’s decision authority has been delegated to the County Governor, thus if the County Governor is the one that have made complaints against the regulation plan, a County Governor substitute (“settefylkesmann”) will be appointed. The municipality is not obliged to inform the Ministry of the Environment of approved regulation plans, however should an approved regulation plan for any reason contradict with national interests, they have to opportunity to either reject it or demand revision of the plan (ibid).

The CG is a part of the regional central administration. There is one CG for each county in Norway, with exception to Oslo and Akershus, which have a common governor. The CG’s assignments are generally related to control, supervision, legal control and direction guidance (Hagen & Sørensen 2003).

There are examples were coastal municipalities have regulated areas for building purposes within the 100-meter belt 20 to 30 years ago, which are still undeveloped and regulated for building (ibid 2002). Hvaler Municipality have such undeveloped areas which have been through earlier municipality plans regulated for cabin building purposes and states in their latest municipality plan that such existing undeveloped

areas shall have no time limit for when building can occur. Having said that, they also express that these areas are not within the 100-meter belt and that they do not “puncture” large untouched areas (Hvaler Kommune 2004). It is also stated in the plan that there shall initially be neither expansion nor building areas within the 100-meter belt. The municipality plan does however state that: *“The Municipality will by the next plan enrolment (2004-2008) consider the possibilities for more cabins”* (ibid: 6).



**Figure 4.** Skjærhalden Rorbuer, which contains 30 cabins with 6 beds each and a larger service house (<http://www.amorøsa.no/images/rorbuer.JPG>).

“Skjærhalden Rorbuer” (figure 4) was first incorporated as a building area into the municipality plan and the area was regulated to its purpose – commercial purposes/tourist facilities. PBLn § 17.2 is only applicable in LNF-areas and this area is not one of those.

Through the building process the project investors ran out of funds, resulting in delays and finally a change in ownership. The new owners demanded that it should be

opened up for private sales for each of the units, however Hvaler Municipality has since successfully registered a clarification of the application as: Tourist facilities based on open, short time tourism, with the exception that up to 10 units can be used by shareholders up to four weeks per year. This kind of “backdoor privatization” within the 100-meter belt is far from atypical and while the case of “Skjærhalden Rorbuer” did to some degree go in Hvaler Municipality’s favor, the case of “Havtunet” at Vesterøy Hvaler tells a slightly different story.



**Figure 5.** “Havtunet” and backdoor privatization: 47 cabins built within the 100-meterbelt with intention of promoting commercial business and tourism (Photo: Knut Sørby).

The area where “Havtunet” is situated was originally an LNF-area, however due to the fact there had been placed a stone foundation there many years earlier, Hvaler Municipality managed to remove the LNF-area status and open up for building.

Initially, the 47 cabins that have been built beside Økholmen at Vesterøy was to be used for short-time rental in order to promote commercial business in the area while at the same time making it possible for people in general to access the area. Yet the politicians had to accept that most of the cottages were sold to the private sector as a result of the CG overruling the HM. Since parts of the “Havtunet” facilities were first sectioned for sale, there are specific paragraphs in the owner section law that counts.



That is also why the CG opened it up for further sectioning. More information on “Havtunet” and “Skjærhalden Rorbuer” will come in the “Findings” chapter of this thesis.

Each municipality has the opportunity to introduce additional building restrictions through the municipality plan. For example, a municipality can prohibit building activity within 50 meter from the shore in a regulated building area, even though the area is originally exempted from the no-building law. In addition the municipality plan can “unregulate” areas that have been originally regulated for building purposes, but still have not been developed upon. It has been noted that many Norwegian coastal municipalities have exercised the use of such old regulation plans in order to exempt the no-building prohibition (Riksrevisjonen 2002). Furthermore the municipality plan can be used to regulate the maximum size of new buildings. The politicians in Hvaler municipality have tried to expand the maximum size of summerhouses to 125m<sup>2</sup> (ibid). However, the CG has denied this expansion. As of today the maximum size for a summerhouse (cabin) within the 100-meter belt is 70m<sup>2</sup> with a maximum façade length of 10 meters, while the maximum size in the beach zone is 90m<sup>2</sup> with a façade length of 12 meters.



**Figure 6.** Building circles at Hvaler (Photo: Pål-Magnus Rybom. Map received from the Hvaler municipality administration).

The orange circles around the recreational settlements as illustrated above restrict further building. The green line marks the beach zone border. The settlements beneath

the green border (the 100-meter belt) have no building circles around them, thus resulting in additional protection in the most exposed areas. This shows how individual municipalities can increase protection in the beach zone and 100-meter belt through adjustments of the municipality plan.

The municipality plan contains guidelines, which entails detailed descriptions of the restrictions to recreational settlements. These guidelines can be found in Appendix 4.

It should be noted that the Ministry of the Environment as well as the politicians have taken measures in order to increase protection. The energy and environment committee stated that: *“The majority of the committee (...) has recognized the increased competition for the beach and coastal zones. The people’s ability to use these areas is under immense pressure. The liberal dispensation practice within the 100-meter belt has led to decreased public access”* (Direktoratet for Naturforvaltning 2001c: 3). To further ensure the right of access, cultural heritage protection and the protection of recreational rights the national political guidelines for the Oslo fjord (RPR-O) was established in 1993 (Riksrevisjonen 2002). The RPR-O is a set of guidelines specifically designed for the dense populated and highly vulnerable coastal municipalities that are situated along the Oslo fjord and Telemark. RPR-O will be handled later in this section of the thesis.

The intention behind these exemptions through approved municipality plans was to achieve a more cohesive utilization of the beach areas as well as looking into general interests (Riksrevisjonen (2002). Furthermore it was contemplated through the Beach Planning Law of 1971 that *“The Ministry has put much weight on considering that nature- and environmental protection and the general right of access is upheld through the planning which is utilized in the beach areas. These interests and the need for socially sustainable development when it comes to recreation and tourism is the main purpose for the draft (...) (Ot.prp. nr. 45 (1970:16))<sup>6</sup>.*

There are examples where municipality plans can be utilized strategically and result in improved access to the 100-meter belt. In certain cases land owners are allowed to develop certain parts of their plots in exchange for the remaining parts of the land are to be regulated as public outdoor recreational areas.

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<sup>6</sup> Translated from Norwegian to English by the author

The building restriction after the PBLn § 17-2 also prohibits partitioning of property. This generally concerns the opportunity to divide undeveloped plot/property and sell it, thus resulting in increased building permit dispensation pressure. However, partitioning of properties with no intended building expansions and partition of developed property for changed use should not be subjected to PBLn § 17-2.

### **2.3.3 Building by Dispensation**

#### **Dispensation from the building prohibition in PBLn § 17.2**

Chapter 19 in the PBLn has as of June 2009, replaced this paragraph. Since the former § 17-2 has played an important part with regard to building within the 100-meter belt up until 2009 I will explain it below. Afterwards I will give details about the revised PBLn of June 2009, which has been legislated in order to further increase protection of the 100-meter belt.

The municipality has had the opportunity to give permanent or temporary dispensation in individual cases from the law and from the land use section in the municipality plan, regulation plan and settlement plan. In the Planning and Construction Act of 1985 the exemption was written in § 7: *“When special reasons exist, the municipality can (...) by application, give permanent or temporary dispensation from the provisions of this law, statute or regulation”* (Riksrevisjonen 2002:14)<sup>7</sup>.

The dispensation practice was basically formed in order to create a certain amount of flexibility when it comes to the regulations in coastal management (DN 2002) and to ensure the individual municipality’s right to self governance and autonomy.

The processing of dispensation can be seen as a two-step process. Firstly, the applicant must have special reasons in order to exempt from the law. Secondly, if the applicant does have valid special reasons, these reasons must be considered with regards to the greater good of the public.

A dispensation can only be given when special reasons are found. The municipality administration must determine if there exist special reasons in order to deviate from the building prohibition and if these reasons are outlined in such a way that they will

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<sup>7</sup> Translated from Norwegian to English by the author

have a positive effect for the greater good. The National Audit Office, in their report on privatization within the 100-meter belt (Riksrevisjonen 2002:18), quote a letter from the Directorate of Nature Management and the Climate and Pollution Agency to the County Governor in 1999: *“Dispensations should only be granted when there is a special reason and it should not be in violation of the plan. The County Governor will maintain clear signals when it comes to municipalities that use dispensations systematically and incorrectly. An extensive dispensation practice entails a misuse of the plan system and an ineffective use of the County Governor’s resources. The County Governor should particularly note the use of dispensations in the beach zone”*<sup>8</sup>.

Dispensation practice within the different coastal municipalities in Norway is very differently managed and there are no effective guidelines as to help decide when and where exemptions from the law should be made. The National Audit Office states in their report of 2002 that many coastal municipalities in Norway have not prepared a written document, which expresses guidelines on how to understand and interpret special reasons (Riksrevisjonen 2002). HM has not prepared such a document. Neither the CG has prepared a document of this kind, and states that it is up to the municipality to assess this. However, typical special reasons that the CG has accepted are:<sup>9</sup>

- Water and sewer access
- Demolition and rebuilding of new building is of better appearance
- Demolition of outdoor toilet for a house extension (usually in water & sewer access cases)
- Removal of single piers to build larger common piers

Dispensation applications are not always sent from HM to the CG. In a letter from 2001 from the CG to HM it was written that routine, when it comes to submission of dispensation applications after the Plan and Construction Act §7, was to be altered. The PBLn §7 states that not all dispensation applications are to be handed over to the state authorities (the CG) for consideration. The following is written: *“Dispensation*

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<sup>8</sup> Translated from Norwegian to English by the author

<sup>9</sup> Interview with the County Governor February 2009

*from the municipality plan's land use section, settlement plan or from this law's §§17-2 and 23 the County Municipality and governmental authorities are, if the case field is directly affected, to be given the opportunity to respond before dispensation is granted” (PBLn 1985 §7)<sup>10</sup>. The CG has the authority to define what kind of dispensation applications to be reviewed. See Appendix 5 for further details.*

The letter states that the reason for implementing these new routines is to give the municipalities greater maneuver abilities when it comes to local politics and self-government (Fylkesmannen i Østfold 2001). Environmental challenges are now to be solved locally, by giving more responsibility to each municipality. The Ministry of the Environment wants the CGs to increase their work when it comes to preparing municipality plans, thus resulting in a clearer distinction of the regulation plan work in order to reduce the amount of dispensation applications (ibid). Furthermore, the letter states that the County Governor's efforts when it comes to processing regulation plans are to be reduced over time and that many of the dispensation applications are to be handled locally. The CG's efforts are to be directed towards issues evolving around cases of national and regional character (ibid).

#### **Dispensation from plan**

Building within the 100-meter belt may also occur in regulated areas by dispensations from approved plans. However the same demand for special reasons applies here. It is important that dispensations from the prohibition and plans should not undermine the system and the purpose of the regulation (Riksrevisjonen 2001). G. Gartmann, from the CG's Office states that in some cases it may be wiser to give dispensations, because a new plan can open up to additional building of piers, boathouses etc, which is normally not allowed.<sup>11</sup> This will be explained later in the thesis.

#### **2.3.4 The Revised Plan and Construction Act (June 2009)**

As a result of coastal communities in Norway mismanaging their right to exempt from the no building legislation, the Plan and Construction Act was revised in June 2009. Chapter 19 has replaced §7, which entails dispensation and “special reason”, resulting in what is meant to be a more strict dispensation system. In chapter 19, the rather inaccurate term “special reasons” is replaced by a set of guidelines, which shall make

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<sup>10</sup> Translated from Norwegian to English by the author

<sup>11</sup> Interview with the County Governor February 2009

the decision-making easier and clearer. According to the revised legislation, the following points shall be considered when dealing with dispensations: (Falck 2009:6).

- Whether all parts behind the legislation it dispenses from is taken into consideration, or if the intentions behind the legislation is significantly disregarded
- Whether the benefits of giving a dispensation will be clearly greater than the disadvantages
- Whether there is sufficient attention of the dispensation's consequences for health, the environment and public access
- Whether there is directed attention to existing national and regional goals and frameworks
- Whether a negative statement from the authorities (the CG) is considered properly
- Whether it is given dispensation from procedural rules

In addition, § 19-4 opens up for the King of Norway to direct the power of giving dispensations to a national or regional organ. This would in many cases mean transferring power from the municipality to the CG. In that way, if a municipality mismanages their dispensation practice, it will lose its right to give dispensations. However, the transfer of authority cannot be done in general, but for certain parts of the coastal zone<sup>12</sup> and mountainous areas. It can also be limited to certain kinds of plans and actions (ibid). This kind of authority transfer can only be used when it is necessary to safeguard national or regional interests. .

### **2.3.5 National Political Guidelines for the Oslo Fjord (RPR-O)**

After the implementation of RPR-O by Royal Resolution on the 9<sup>th</sup> of July 1993, the Ministry of the Environment contacted the southeastern County Municipalities, which resulted in a joint meeting the 22<sup>nd</sup> of October 1993 between the coastal municipalities from Halden to Kragerø. The municipality plan's land use section, delimitation of the coastal zone and guidelines for legal processing were prioritized in the project. (Østfold Fylkeskommune 1996).

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<sup>12</sup> Coastal areas that are under extreme pressure; like the communities around the Oslofjord

Basically, RPR-O are a set of strict rules that are only applicable for coastal areas in the southeast of Norway due to the high population density that results in a high amount of pressure on the 100-meter belt.

As mentioned before, the PBLn is not an absolute prohibition against building with the 100-meter belt. In this case however, PBLn § 17-1 states that: *“The King can create general objectives and framework, and give guidelines for the physical, economic and social developments in counties and municipalities that will form the basis for the planning of this law”*<sup>13</sup>. These guidelines are created to protect overall national interest. Nevertheless, the RPR-O does not produce a legal institution for binding land use disposal for property owners. However a direct legal institution for property owners will be realized when the guidelines are implemented into land use plans after PBLn (DN 2002). These guidelines compel the coastal communities in question to define a protected zone that stretches further than 100-meters from the shore. This is called the beach zone and extends the 100-meter belt by 200 meters into the land, resulting in a total protected belt of 300 meters.

### **2.3.6 The Nature Conservation Act of June 1970 No. 63**

This legislation was passed in 1970 and states that nature is of national value and thereby is to be protected. It is Norway’s most effective law for protecting biological diversity (Direktoratet for Naturforvaltning 2009). §1 and 2 in the Conservation Act define conservation of nature as: *“to manage natural resources out of concern for the close interconnection between man and nature and to maintain natures quality for the future. Intervention in nature should only be carried out in a sustainable way and take into consideration that the future, well-being and life of mankind is dependent on it”* (The Conservation Act 1970)<sup>14</sup>.

The Conservation Act evolves around 4 different schemes of protection; National parks, landscape protection area, nature reserves and nature heritage. The qualities of the area in question define which of the protection schemes should be utilized. For example, National parks are constructed in order to protect large unique, relatively untouched areas. This protection scheme might be considered the second most total,

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<sup>13</sup> Translated from Norwegian to English by the author

<sup>14</sup> Translated from Norwegian to English by the author

of the four when it comes to protection. However, as we shall see later in the thesis when dealing with Outer Hvaler National Park, the amount of human influence in the park area creates obstacles not experienced in any other Norwegian national park, thus making management difficult. Landscape protection areas can be considered to be the least total of the four schemes when it comes to protection and evolves around areas that are considered to be unique and beautiful. Within these areas intervention that will significantly alter the state of the area is prohibited (The Conservation Act 1970). Nature Reserves is the protection scheme that might be considered to be the most total of the four and evolves around areas that contain untouched or relatively untouched nature or special nature types that have extraordinary scientific or pedagogic meaning (ibid). Examples are forest reserves and bird reserves. Finally, the nature heritage scheme is not an area of protection in itself, but rather geological, botanical or zoological resources that can be considered to be in need of protection. The area around the resources can be protected in order to efficiently protect the resource (ibid).

Areas that are protected by the Conservation Act are to be written into the municipality plan, thus making it an important factor for regulating building activity on the coast.

### **2.3.7 The Cultural Heritage Act of June 1978 No.50**

Cultural heritage means all traces of human activities in our physical environment, including sites associated with historical events, faith or tradition (Cultural Heritage Act 1978 §2). Furthermore the Cultural Heritage Act §1 states that: *"Cultural heritage and cultural environments with their distinctiveness and variety are to be protected as part of our heritage and identity and as part of a comprehensive environmental resource management"*<sup>15</sup>. Additionally, it is written in the Cultural Heritage Act that when other law decisions affect cultural heritage resources, it is this law that is to be taken into consideration. This means that the Cultural Heritage Act outranks the Plan and Construction Act in some cases. As a result, the authorities that manage the Cultural Heritage Act can prohibit the municipality plans as building areas. When it comes to the actual plan processes, the municipality is to research and identify any cultural heritage resources that might come in conflict with regulation

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<sup>15</sup> Translated from Norwegian to English by the author



plans and settlement plans (ibid §9). If someone wants to start projects, which involves cultural heritage resources, the actors have a duty to report such activities according to §8 in the Cultural Heritage Act. When dealing with dispensations that affect cultural heritage resources, the applicant will have to send their application to the cultural heritage authorities in addition to the normal dispensation application from the Plan and Construction Act. The Municipality does not have the authority to approve such an application by themselves (DN 2002).

### **2.3.8 The Outdoor Recreation Act of June 1957 No.16**

The Outdoor Recreation Act (“Friluftsloven”), was legislated the first of July in 1957, and together with the Plan and Construction Act represents the most important legal guidelines for the municipality when ensuring public access and regulating further building along the coasts. The legislation states in §1 that *“The purpose of this Act is to protect the natural basis for outdoor recreation and to safeguard the public right of access to and passage through the countryside and the right to spend time there, etc, so that opportunities for outdoor recreation as a leisure activity that is healthy, environmentally sound and gives a sense of well-being are maintained and promoted”* (The Outdoor Recreation Act 1957). Perhaps most central regarding the municipality’s ability to regulate building activity are § 13 and §40, which presents legal opportunities to stop building activity, demand the removal of buildings, public access obstructions or other constructions that are not in consistence with the Act.

Since property borders themselves cannot restrict public access, the Recreational Act distinguishes between two other limiting sectioning of the land; cultivated land (“innmark”) and uncultivated land (“utmark”). §1a in the Recreational Act states that cultivated land means: farmyards, plots around houses and cabins, tilled fields, hay meadows, cultivated pasture, young plantations and similar areas where public access would unduly hinder the owner or user, while uncultivated land means: land that is not tilled and that is not considered to be equivalent to cultivated land in accordance with the preceding paragraph (ibid). Consequently, any person is entitled to access and passage through uncultivated land at all times of the year, provided that consideration and due care is shown.

As for public access, cultivated land and its definition is very important. One can say that all private buildings have a personal private sphere around them, an exclusive

private zone, which is reserved for the owners. Hence, all buildings within the 100-meter belt and close to the sea will cut off the public from a much larger area than the buildings themselves. Defining this private realm around buildings can be rather diffuse. As a general rule, one acre around a building is defined as cultivated land, however this differ from location to location (Den Norske Advokatforening 2007). As an example, a cabin owner took HM to court in order to stop the public from using a pathway that went through his property. On the property lies both a main cabin and a boathouse, thus the cabin owner claimed that the area around and between the two buildings should be considered as cultivated land. The pathway, which is used frequently by the public, is situated 20 meters from the main cabin and 7 meters from the boathouse, which is located right next to the sea. The cabin owner lost the case against HM and the victory is considered to be groundbreaking when it comes to future protection of public right of access. This is known as the Herføl verdict.

## **2.4 Nature, Biological Diversity and Culture at Hvaler**

### **2.4.1 The Convention on Biological Diversity**

Norway ratified the United Nation's (UN) Convention on Biological Diversity (CBD) the 9<sup>th</sup> of July 1993, and the convention was taken into law the 29<sup>th</sup> of December 1993 (Nilssen 1996). It contains three main objectives:

1. The conservation of biological diversity
2. The sustainable use of components of biological diversity
3. The fair and equitable sharing of benefits arising out of utilization of genetic resources

Under this convention, Norway is required to conserve and use biodiversity sustainably. Norway is obligated to “*develop national biodiversity strategies and action plans, and to integrate these into broader national plans for environment and development*” (Secretariat of the Convention on Biological Diversity 2000: 9).

As a response to the CBD commitments situated above, the Norwegian government committed to Local Agenda 21 (LA 21), which states that each county shall monitor and document biological diversity. This project was based upon the idea of “*think globally, act locally*”. In 1998, Local Agenda 21 finally resulted in the Fredrikstad Declaration, which now entails 267 municipalities and all of the county-municipalities (Nilssen 1996).

Furthermore LA 21 and the Fredrikstad Declaration express the importance of an interdisciplinary approach in order to achieve protection and sustainable use of biological diversity. In addition, the national plan expresses the importance of decisions that may affect the different values of biological diversity. HM is therefore required to state which values are related to the total diversity. Categories of value, which should be taken into consideration, are according to Nilssen (1996):

- Life-giving ecological systems and processes, which regulate water, air and soil. These areas are the wet-land at Hvaler
- The use of biological and genetic components or processes for food production, medicine fabrication, energy production and other products/production of these e.g. building material and paper
- Recreational values related to the use of biological diversity and organisms, which is exceptionally important at Hvaler
- Scientific and educational values. Hvaler has for a long time been an important excursion area for scientific and educational purposes for schools and universities dealing with many different areas of expertise
- Esthetical, symbolic, emotional and cultural values, which are to be found all over Hvaler islands

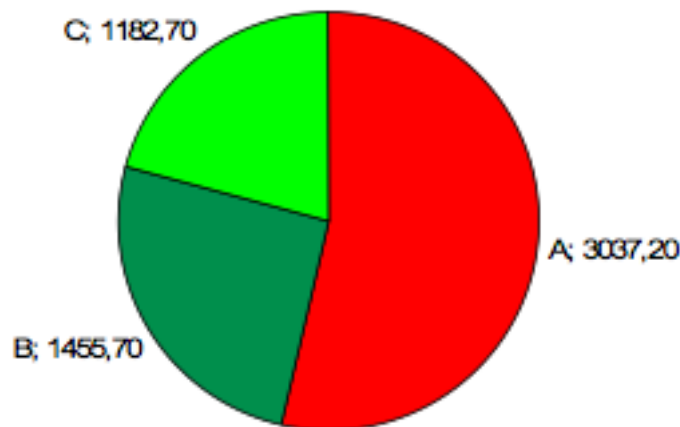
2010 is the International Year of Biodiversity where the CBD urges the international community to reflect on our achievements to safeguard biodiversity and focus on the urgency of our challenge of the future.

It becomes clear why the Hvaler archipelago (and other coastal municipalities) have received so much attention when it comes to the environment and access rights the last 10 years. Due to its location all the way southeast, the climate produces excellent living conditions for a rich variety of species. In fact, the municipality of Hvaler probably entails the highest amount of threatened and vulnerable higher plant species (“karplanter”) in all of Norway (Fylkesmannen i Østfold 2008). As one of the most popular cabin communities as well harboring such a high amount of threatened plant species, environmental governance and management is particularly important for HM.

#### **2.4.2 Biological Diversity**

There have been mapped 200 nature type locations, which is distributed over 21 different nature types at Hvaler (Blindheim et al 2007). As mentioned earlier, the

municipality of Hvaler probably entails the highest amount of threatened and vulnerable higher plant species in all of Norway. If compared to the national average, there is probably a higher rate of A (very important) and B (important) at the Hvaler archipelagos than in other Norwegian municipalities (ibid).



**Figure 7.** Distribution of A, B and C locations for nature type locations at Hvaler (ibid: 6).

There has been registered red listed species on 136 of 200 nature type locations and the total amount of red listed species in Hvaler Municipalities is estimated to be 128 (ibid: 11).

Tisler, an island that is now a part of Outer Hvaler National Park, has the largest inshore coral reef in Europe, 1200 meters long. This Coral reef was originally 2000 meters long, but has been reduced due to sea floor trawling. The coral reefs at Tisler are habitats for numerous species and make the area unique in a European context.

#### **2.4.3 The Case of the Musk Orchid**

To establish the origin behind the laws against building within the 100-meter belt, it is vital to look at biological diversity. Firstly, protection of biological diversity is the key to upholding the fragile ecosystems that sustains human population. Secondly, biological diversity is by many measures what makes the recreational values found at Hvaler what they are today. Consequently, Hvaler would not be one of the most popular cabin communities in Norway had it not been for the rich, though degrading biological diversity that exists on and around the islands. Thus it is in the interest of everyone, even cabin owners to maintain and uphold the unique nature in this region.

The musk orchid *Herminium monorchis* (L.) R.Br. is a small fragile honey-scented orchid, which has been in rapid decline as a species the last 150 years. Out of almost 70 localities scattered around Norway, only three localities are intact today; all three situated at Hvaler. All three localities are located on Asmaløy; Skipstadsand, Skjellvik and on the shore close to Teneskjær (Båtvik & Nytrøyen Kvavik 2009). The musk orchid is presently red listed as critically endangered, giving HM a great challenge in preserving this extremely fragile plant.

The dramatic decline in the musk orchid is explained by the fragile ecologic tolerance bound to humid alkaline shores and meadows formed by long time grazing mainly by cattle (ibid: 6). The main threats to the musk orchid are change in agricultural practice, manuring, draining, and new area dispositions (ibid). Up to now there have been no cattle left to graze by the three localities, leaving the orchid vulnerable to other competitive species. However, Tuesday the 24<sup>th</sup> of June 2009, The CG, in collaboration with Hvaler Grazing Union and plot owners introduced six cattle for grazing in the Skjellvik area (Fredrikstad Blad 2009). Monika Olsen with the CG states that the CG's Office is highly concerned about biological diversity in the national park and that plot owners in the area want to control the vegetation growth with grazing animals (ibid). It would seem this is a win-win situation for the parts involved in the project. The general public will still have access to the area as long as dogs are tied up and people close the fences that hold the grazing animals, after they exit the areas.

The musk orchid was temporarily protected by the Conservation Act in 1989 and permanently protected in 2001. The preservation entails to "*safeguard from direct damage, destruction and gathering/collecting*" (ibid: 81). However, the musk orchid preservation achieved at this point cannot prevent habitats from being destroyed or made less optimal due to natural processes. In addition the musk orchid has no protection against building that is approved through the Plan and Construction Act (ibid). Although Hvaler Municipality should be aware of the problems involved with the musk orchid through media and the extensive rapport written by Båtvik and Kvavik in 2009, the mere fact that this critically endangered species is not fully protected from building might be of concern. Firstly, we have seen before how gaps, mistakes and external pressure might lead to building within fragile nature localities. Secondly, according to the president of Østfold Botanic Union, Jan Ingar Båtvik,

there is no position within the municipality administration that has the education and the experience needed to protect the musk orchid<sup>16</sup>. Nevertheless, the remaining localities of the musk orchid will be located within Outer Hvaler National Park, making it difficult to harm musk orchid populations through the PBLn.



**Figure 8.** Population of the Musk Orchid at Skjellvik, Asmaløy, Hvaler, June 2008. Photo: Egil Michaelsen

In 2008 a cabin owner in the area cut the musk orchid population at Skipstadsand with a lawnmower. This tells us something about the negative effects privatization and human expansion within the 100-meter has on fragile biodiversity.

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<sup>16</sup> Interview with Båtvik (Østfold Botanic Union) 24.06.2009



**Figure 9.** Hellekilen Kirkeøy, a former locality for the musk orchid where the creation of parking lot destroyed it. Picture was taken in 1987 when it was built. Photo: Geir Hardeng.



**Figure 10.** Hellekilen Kirkeøy portrayed as of today, with extended parking were the musk orchid used to thrive. Photo: 2009, Jan Ingar Båtvik

Due to the creation of the parking lot at Hellekilen (Figure 9 and 10), there have not been any observations of the musk orchid at this locality since 1999. As of today there

are no plans of change in land use in the municipality plan regarding the locality at Hellekilen. However, the authors of the rapport on the musk orchid states that it would be best to restrict land use in this area and start with the advised management plans for orchid localities in order to see if the plant might re-introduce itself (ibid).

What will happen to the musk orchid in the future is difficult to predict, however there is no doubt that it will not survive without the protection and increased efforts of HM. Although the CG's environmental department and botanists will be there to follow up on the red-listed orchid, they need the full attention of HM in order to save the musk orchid.

#### **2.4.4 Sea Birds at Hvaler**

Hvaler is home to a rich variety of animal life that also includes different species of sea birds. Islets, narrow inlets, wetlands and shore meadows offer breeding, resting and overwintering sites for numerous bird species. The number of species observed in the area is higher than usual for Norway; more than 260 have been observed on Akerøya alone (Direktoratet for Naturforvaltning 2009).

Recent studies have shown that there is a general decline in seabird numbers around Hvaler<sup>17</sup>. More information on seabirds can be found in the "Findings" chapter.

#### **2.5 Outer Hvaler National Park ("Ytre Hvaler Nasjonalpark")**

The Norwegian Government states that in order to secure national park status it must consist of *"larger natural areas that contain unique or representative ecosystems or landscape forms and is not affected by substantial nature encroachment"* (NOU 2004:28). The term "substantial nature encroachment" is used because previous definitions like "untouched" or "relatively" untouched nature often was misleading and/or misunderstood, due to human presence and activities. The areas within Outer Hvaler National Park are very much influenced by human activity thus resulting in extreme challenges when it comes to the management plans for the park.

Hvaler National Park is located within Hvaler and Fredrikstad Municipality and the national park borders contains approximately 354km<sup>2</sup> of terrain, where 340km<sup>2</sup> is oceanic and 14,5km<sup>2</sup> is land based (Richter & Larsen 2008). Thus, approximately

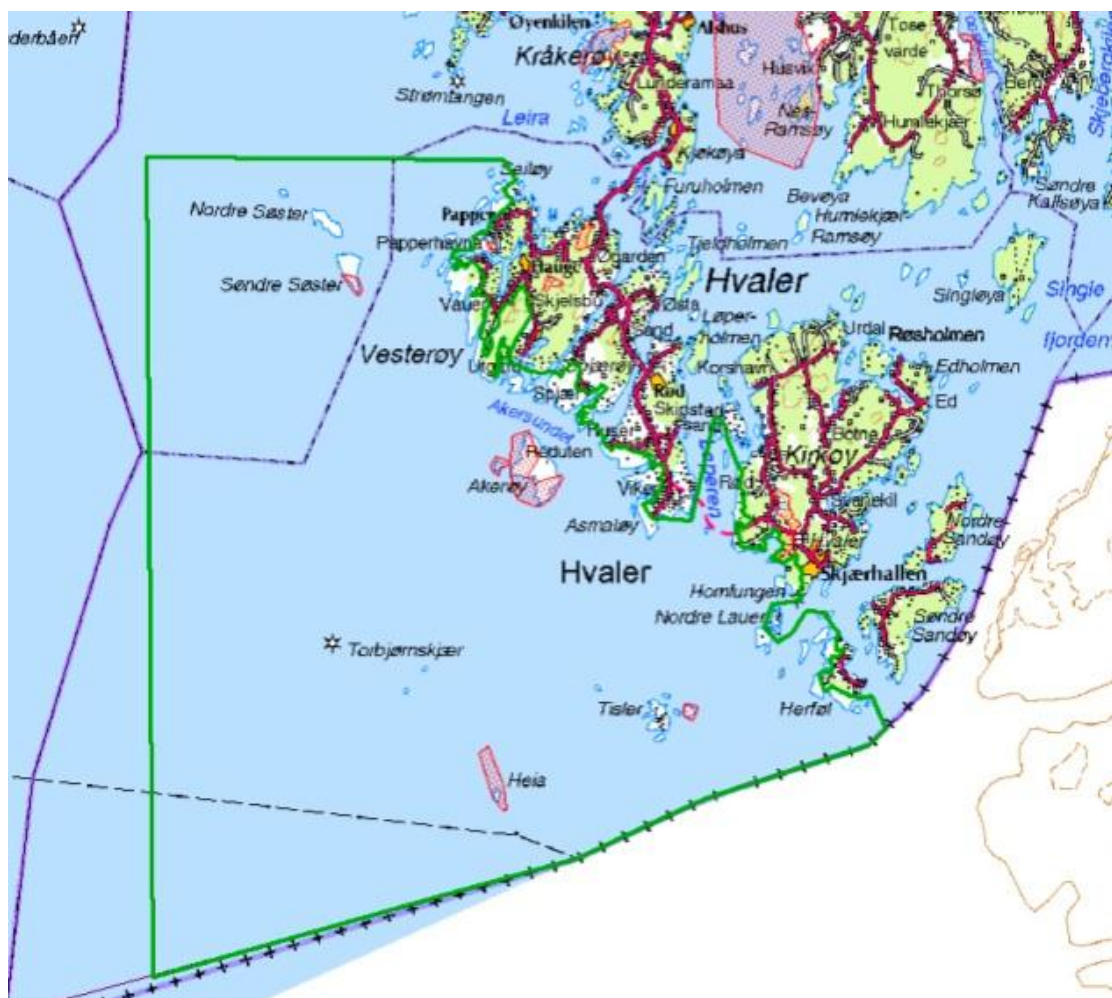
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<sup>17</sup> Informal interview with Johansen 09.02.2010



90% of the area is oceanic. In fact, Outer Hvaler National Park is the first marine national park in Norway.

On the Norwegian side, the park stretches from the S ster islands in the north, past Torbj rnskj r and down to the Swedish boarder. From there on the boarder extends northeast of Herf l and incorporates the larger Hvaler Islands outer coastlines. At the same time as Outer Hvaler National Park was established in Norway, “Kosterhavets National Park” was created in Sweden. There is much collaboration between the two when it comes to park management between the two countries, and combined the two areas make up for Europe’s first national park, which focuses on oceanic areas.



**Figure 11.** Hvaler National park. The park is situated within the green boarder (Andersen et al 2006: 11)

Main reasons for creating the National Park:

(Andersen et al 2006: 10)

- Preserve a large and relatively untouched area on the coast of south-east Norway
- Preserve a diverse landscape beneath the ocean
- Preserve ecosystems with the indigenous inhabited species on dry-land and in the ocean, coastal landscape with ocean surface and seafloor including coral reefs, hard and wet ocean floor
- Guarantee public access to nature and landscape and recreational activities

(“Oslofjordens Friluftsråd”) (OF) has for decades protected areas for outdoor activities on the outer side of Hvaler archipelagos. Prior to the park establishment, OF ensured large areas through either purchase, or agreements of public use. Without the work that OF has done, the national park would probably never have existed.

The work on establishing the national park formally started in 2004, when the CG invited the affected municipalities and other parties to participate in official discussions. The groups that participated in the discussions were: Fredrikstad and Hvaler Municipality, Østfold County Municipality, the Fishery Authorities, the Fishery Organizations, non-governmental organizations, representatives for land owners and OF. During the process of establishment all the parties affected by the park have been encouraged to offer inputs on the project. Inputs from the different parties involved have been, as much as possible, taken into consideration when creating the park boarder in order to secure user interest as well as reducing the complexity of the management plans.

### **2.5.1 Park Rules and Regulations**

For the average tourist, outdoor recreation and boat life is not much affected by the establishment of the park. As a main rule, these activities can be utilized as long as due consideration and respect is shown to vegetation, animal life and cultural heritage. Most of the restrictions within the national park were already in place before the park establishment. The overall goal of the park is rather to combine all previously protected areas to safeguard the ecosystem as a whole.

The fishing industry is mostly affected when it comes to zone A within the park, where the sea floor is protected. Due to the large coral reef in that area, fishing equipment, which is dragged along the sea floor, is now illegal. In addition, underwater cables are now prohibited in these areas. Naturally, there has been some discussions and

disagreements between the fishing industry and the authorities, but Aase Richter at the CG's Office states that the fishermen has in general been tolerant and positive to the park establishment (Oslofjordens Friluftsråd).

Cabin owners, which are located within the park borders, can perform general maintenance on their cabins, but are submitted to stricter rules when it comes to expansion and building. In addition, it will be prohibited to construct buildings on undeveloped property. However, this has been prohibited prior to the park establishment.

In general all plant and animal life is protected, however it is allowed to pick berries, mushrooms, common plants and dead seaweed for personal use.

It is forbidden to create fires directly on to the mountains and only with fallen timber. The reason for this is that fires created directly on to the mountains will result in scorch marks. In the most popular recreational areas it is now noted that the lower branches on the trees are situated significant higher than before, hence the rule that only fallen timber can be utilized (ibid).

In addition, the four bird reservations have increases to seven and all human traffic within these areas are forbidden from the 15<sup>th</sup> of April to the 15<sup>th</sup> of July. In relation to animal life, a five knots restriction for boats is implemented to some areas.

### **2.5.2 Tourism, Recreation and Cabins within the National Park<sup>18</sup>**

When dealing with the consequences on outdoor recreation, tourism and cabins, it is important to establish what kind of value each of the categories have in the area in question. A rapport written by Andersen, Aas and Kaltenborn about impacts on outdoor recreation, tourism and cabins states that both outdoor recreation and cabins are of "very large" value to the area, where as tourism has been rated to a "large" value. Furthermore the rapport concludes that the park will in fact have general positive effects on these three categories (Andersen et al 2006). When dealing with outdoor recreation, the national park will create a more complete perspective to user groups within this category, instead of having to deal with different buffer zones with distinctive rules and regulations (ibid). Tourism in the area prior to the park establishment has not been significant, but it is reasonable to believe that the national

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<sup>18</sup> This sub-chapter is based on a term paper I wrote in the UMB course EDS330 Political Ecology

park will draw more tourists and tourist business to the region because of its national park status alone. As long as the tourist activities are in cohesion with the park rules and regulations, this category will be positively affected by the national park (ibid). Because Hvaler is one of the most important cabin municipalities in Norway with approximately 4700 registered cabins, it is difficult to believe that this category will not be negatively affected. However, the boarder of the national park is constructed in a way so that only 50 cabins will be located within the park. The cabins that are located inside the park were already, prior to the park establishment, under strict rules and regulations because of their location close to the sea. Thus this category is projected to be only slightly negative affected by the park establishment (ibid). All these projections will however, largely depend upon the management plan for the park, which when writing this thesis, was not finished.

### **2.5.3 Park Management from a Political Ecology Perspective**

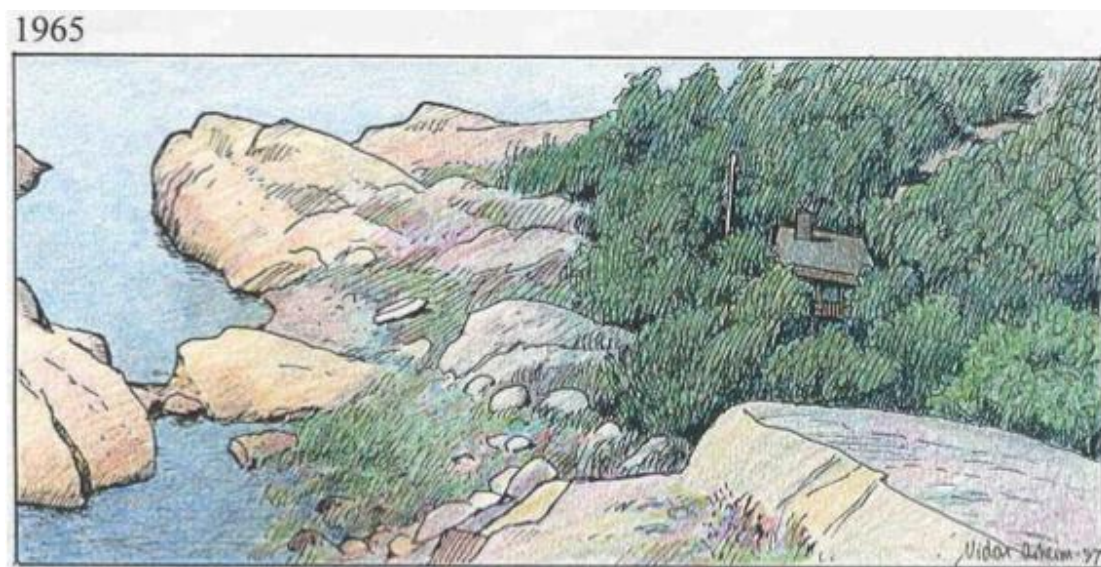
What is noteworthy about Outer Hvaler National park is that this area is already highly influenced by human presence and activities. No other national park in Norway includes this specter of human presence prior to park establishment (Andersen et al 2006). Thus, this will result in extensive rules and highly delicate management plans in order to secure outdoor recreational activities, tourism and cabin owner's interests. The reason for this is because there are so many interest groups within the park boarder to take into consideration. This is definitely not an area were environment and society can be artificially partitioned, like witnessed in so many sub tropical countries in the third world. However, this has never been the point in the creation of Hvaler National Park in the first place. The boarder that surrounds the park has not only been specifically created to be where it is now in order to preserve the fragile nature, but also to limit damage to the existing human population, interests and commercial activities to a minimum. The general problem when it comes to national parks and conservation management is that there often exist a disciplinary vacuum between natural science-trained conservationists and social science-trained critics of conservation (Adams and Hutton 2007). Social scientists typically integrates politics as means for analyzing conservation, while natural scientists put this aside, viewing politics as a hinder for practical action (ibid). Thus there is need for cooperation and mutual understanding between these two disciplines in order to preserve nature as well as incorporate and integrate local people in the park area. The school of political

ecology advocates a more interdisciplinary approach to conservation, where natural and social science are merged and discussed in relation to each other. Where many governments have simply set up fines and fences, imposing “wilderness” on an area, the Norwegian authorities have carefully taken into consideration whatever objections and statements interest groups inside the park boarder have had, in addition to preserving endangered species as well as maintaining outdoor recreational rights.

## 2.6 Public Access in the Coastal Zone

In addition to further enhancement of cabins in the form of extensions through dispensation from the building prohibition there has been noticed an increase in development of property in the form of patio, terraces, outdoor fireplaces, stairs and gardening. This transforms cabin areas from “wilderness”<sup>19</sup>, to constructed property that can be understood as privatized which results in decreased public access to the coastline.

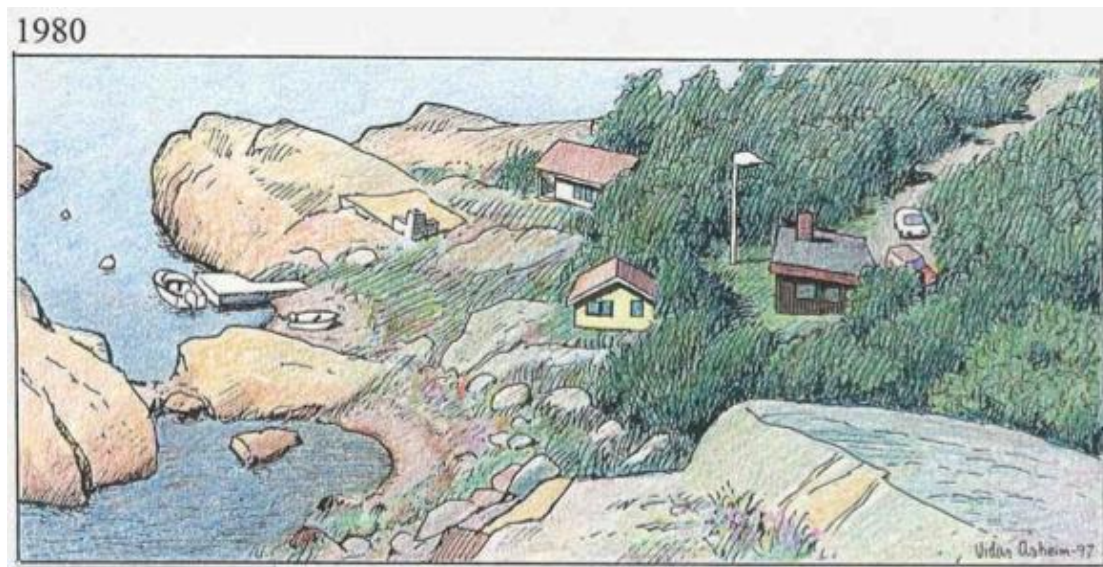
The following three figures portray how privatization in general has occurred from 1965 and up to modern times. The result is that public access to the coastline and the 100-meter belt becomes nearly inaccessible.



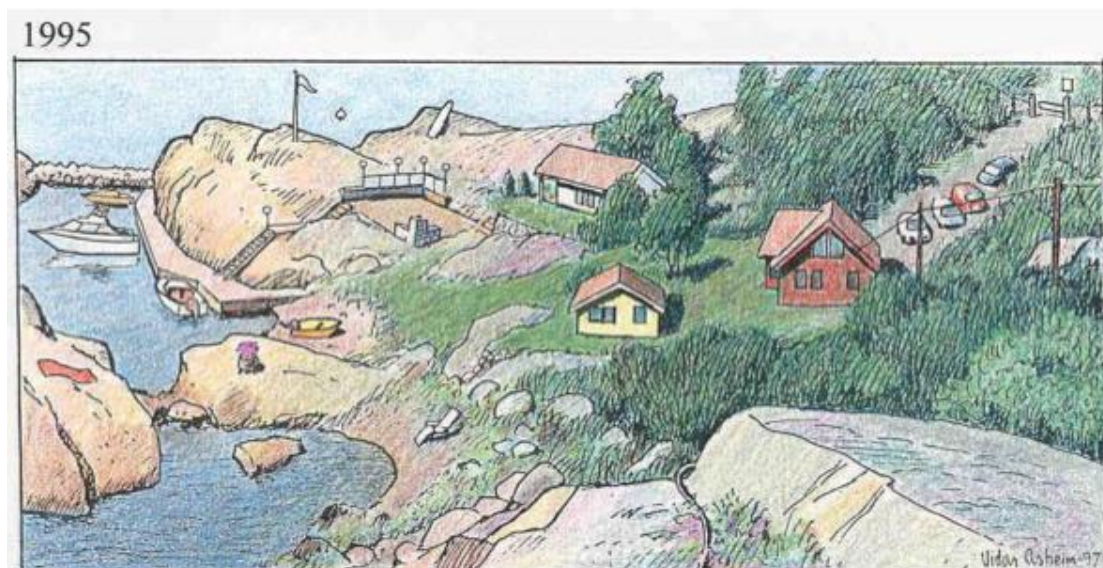
**Figure 12.** Illustration of cabin development 1: *In the middle of the 60s cabins were scattered, often placed within the forest-line. As a result the public could without difficulties access the coastline*

<sup>19</sup> Wilderness is a social constructed term, but in this setting expresses areas that are relatively untouched by human influence and can be enjoyed for recreational purposes

without bothering the cabin owner. Set aside from the flagpole located within the forest and a small boat on the beach, the public had no problems with using the area for recreational purposes (Østfold Fylkeskommune 2002:7).



**Figure 13.** Illustration of cabin development 2: In the 80s, the family has grown, and has built two smaller buildings facing the sea through dispensation from the building prohibition. In addition the cabin owner has built a pier and an outdoor fireplace. Furthermore, there is now a small parking place beside the main cabin. The area is still accessible for the public, though movement in the area can be perceived as somewhat uncomfortable (Østfold Fylkeskommune 2002:7).



**Figure 14.** Illustration of cabin development 3: In the 90s, the old cabin has been demolished and replaced by a more modern version with water, sewer and electricity connection. The old pier has been replaced by a larger one, resulting in a private harbor. The fireplace has extensions in the form of walls and lights, there are now stairs from the fireplace and down to the pier, and the flagpole has been

moved closer to the ocean. A lawn has replaced the surrounding forest and the parking place is larger, behind a sign, which reads: “Private” (Østfold Fylkeskommune 2002:8).

In 1999 the Ministry of the Environment encouraged the coastal communities, the county municipalities and the county governors to make dispensation and plan practice within the 100-meter belt and central coastal areas more strict. As a result, a rapport, which mapped obstructions within the beach zone, was written.

The obstructions were registered into 18 different groups e.g. cabin, cabin extension, outhouse, pier/diving board, terrace, stairs/walkway, flagpole, sign and fence.

Approximately 20% of Hvaler`s coastline was mapped, leaving out large parts of “Kirkeøy” and smaller islands.

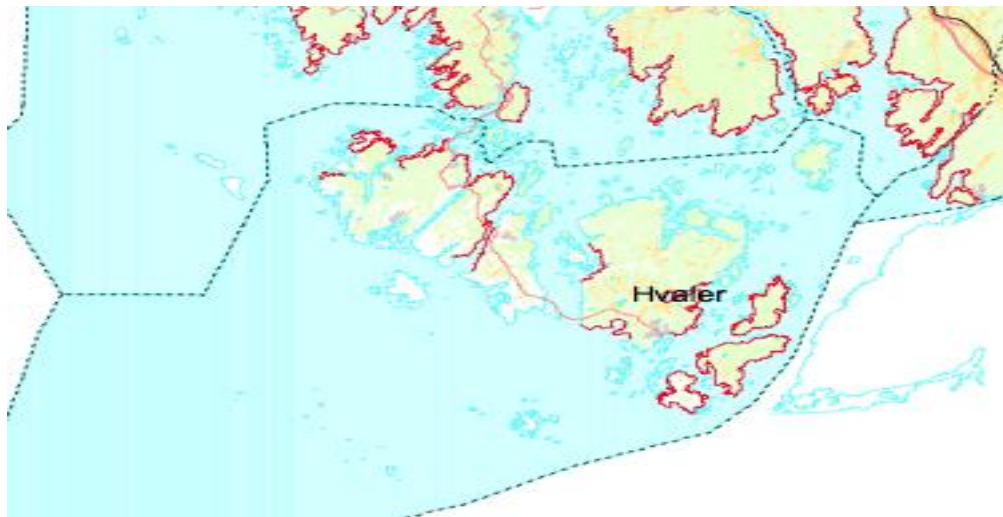


Figure 15. Mapped coastal obstacles (red line). (Østfold Fylkeskommune 2002:14).

More on the results of the findings from this report, as well as my own, will be handled in the “Findings” chapter of the thesis.

### **3.0 Methods of Data Collection and Analysis**

The research objectives, which are listed in chapter 1.9, are well suited for the use of qualitative methods. Qualitative research is best applied where the purpose is to go into depth in one or just a few cases, rather than go into depth of many. It aims to gather an understanding of human behavior and the reasons that govern such behavior. Consequently, qualitative method looks into the why and how of decision-making, thus the need for smaller but more focused samples.

The overall research method used in this thesis will be based on qualitative research, which “emphasizes an inductive approach to the relationship between theory and research, in which emphasis is placed on the generation of theories” (Bryman 2004). In other words, I will place most of my attention on analysis, interpretation and usage of existing relevant documents in order to generate theories that explain the phenomenon. However, there are theories on environmental governance, common resource pool problems, management theory and rational choice theory, which will be integrated in the theory chapter of this thesis.

I will use quantitative research with regards to the cabin owners and the fishermen. This is to gain insight to the opinions and influence of these two pressure groups.

### **3.1 Validity**

This thesis does not intend to generalize the findings that are represented. However, individual studies might result in theory-developing properties. This is a key point in Glaser and Strauss’ Reasoned Theory (Andersen 1997). The objects of the studies are empirical material and the purpose is to formulate concepts that draw out the essence of the data. Hence, this is the focus of the thesis.

The amount of information, cases and legal concerns that are linked to coastal zone management is massive. There are so many cases, and so much information I would like to integrate in the thesis, which I unfortunately did not have the time, or the resources to complete. As an example, I would definitely have liked to analyze data from Hvaler Municipality’s archive room, but from what I was told by the Hvaler Municipality administration, the archives are not well organized and the amount of time-use related to this, makes the task impossible for this project. I would like to recommend future researchers to look into specific cases from these archives in order to gain further insight to HM policy making and actions.

To fully understand the complexities surrounding coastal zone management, one would probably need some sort of legal background and have experience with work linked to coastal zone management. Consequently, I was not able to fully analyze the complexities when it comes to law within the 100-meter belt. This thesis is about privatization and development within the 100-meter belt and the outcome for public access and the biological diversity, and therefore I have only analyzed laws and legal issues that I believe is relevant for this.



### **3.2 Research Design: In This Study: Case Study, One Case**

The research for this thesis will be conducted within a case study design. This is because a specific community has been chosen as a case: Hvaler, in order to provide suitable context for the research questions to be answered. Bryman (2004) mentions that standard criticism of case studies is that findings cannot be generalized. However, as mentioned above, it is not my intention to generalize my findings with other municipalities, but to use my case as means for providing substance to my research. The strength of the case study is its focus on one or more specific events, and not to what degree the selected case is representative for the second case (Stake 2006). Yin (1994) believes that the context is important in case studies, because the case and the context cannot be viewed independently. Yin also believes that in some situations, the researcher is not able to fully understand the case if it is not analyzed in relation to a wider context.

Historical Context is frequently of importance. As mentioned earlier in the thesis, Norwegians has an identity, which touches upon a feeling of being one with nature in terms of enjoying the recreational activities the Norwegian landscape has to offer. This becomes clear through the Recreational Act of 1957, which legislate that all Norwegians should have the opportunity to benefit from the recreational values of the land. As a consequence, we can understand the governmental regulations that are applied to coastal areas.

### **3.3 Data Collection**

In order to apprehend a greater understanding of the phenomenon I conducted interviews with HM, the CG in Østfold (the executive authorities) and different pressure groups. There are three different sets of questionnaires, one for each of the groups stated above (Appendix 1, 2 and 3).

The questionnaires for HM and the CG are semi-structured interviews. The reason for this is because the questions asked here is of in-depth character, which also requires follow-up questions. A checklist was used, however extra questions were asked in order to improve understanding of the study area. The aim of these interviews was to gain insight in the process of decision-making; how are they made, who makes them and the relationship between the decision-makers.

The pressure groups, which were interviewed, are: Hvaler Cabin Union and the cabin owners, fishermen, Østfold Botanic Union (“Østfold Botaniske Forening”), and the Nature Conservation Association (“Naturvernforbundet”). These interviews were carried out in order to gain a greater understanding of the pressure groups and stakeholders involved, what kind of influence over the decision-making they hold and their general opinion on development of the coastline.

### **The Executive Authorities**

The respondents involved in the executive authorities interviews were: Geir Gartmann and Ole Martinsen at the environmental department with the CG’s Office and Anna Auganes with the administration of HM.

#### *The County Governor’s Office:*

Gartmann is a senior adviser at the CG and has an education within Civil Engineering. He deals with academic advice or objections concerning plan cases such as: regulation plans and municipality plans. Martinsen has an education within Forestry and deals with dispensation cases. In addition I conducted a small interview by mail with Geir Hardeng, Advisor at the County Governor’s Office

#### *Hvaler Municipality Administration:*

Auganes is Executive for Planning and the Environment (“virksomhetsleder for plan og miljø”) and has an education within architecture and areal planning. She deals with areal planning, geodata and environmental management. In addition, I conducted smaller interviews by mail with Executive Advisor (“Rådmann”) Torleif Gjellebekk, and Bernt Erik Larsen; who now works with Outer Hvaler National Park.

Since HM is structured around both the administration and the elected politicians, it will be noted that when I refer to HM I mean the administration and my interviewee, Anna Auganes. The same applies to the CG, which refers to the interview with Gartmann and Martinsen at the department of the environment with the CG.

## **The Pressure Groups**

*Hvaler Cabin Union:* In-person qualitative interview with the president of Hvaler Cabin Union; Gunnar Dahl-Johansen.

*The Cabin owners:* From the selected sample of 25 cabin owners, 21 of them were available for interviewing. These interviews were conducted by phone, and were of quantitative method.

*Hvaler Fisher Union:* In-person qualitative interview with the president of Hvaler Fisher Union; Jan Gunnarsen.

*The Fishermen:* From the selected sample of 10 fishermen (provided by Gunnarsen), 7 of them were available for interviewing. These interviews were mostly quantitative, but I left room for any additional thoughts they might have on the subject at the end of the interview.

*Østfold Botanical Union:* In-person qualitative interview with the president; Jan Ingar Båtvik.

*Nature Conservation Association (“Naturvernforbundet”):* In-person qualitative interview with the president of Østfold County; Pål Bugge and the president of Hvaler Municipality; Arild Ådnem.

When conducting qualitative research, variables may not be easily identified, thus the focus has been chosen on the following categories of key variables in the questionnaires for the CG and HM:

- Tendencies concerning development
- Future concerns on management in the area
- Legal issues
- Relationship between HM and the CG

In order to gain perspective through a large sample size, the questionnaire for the pressure groups was created in a structured quantitative matter, making little or no room for misinterpretations or uncertainties among the respondents. The main variables studied in these interviews are as follows:

- Relationship to Hvaler

- Disputes with HM
- Influence on HM
- Opinion on official 100-meter belt policies
- Opinion on public access within the 100-meter belt
- Opinion on environmental degradation within the 100-meter belt

It should be noted that the interviews that were conducted with the presidents of the pressure groups were semi-structured; hence I encouraged the respondents to give open answers.

### **3.4 Source validity**

Challenges occur when making personal and non-personal interviews. Bryman (2004) claims there are 6 principal sources of error when it comes to survey research:

1. A poorly worded question
2. The way the question is asked by the interviewer
3. Misunderstanding on the part of the interviewee
4. Memory problems on the part of the interviewee
5. The way the information is recorded by the interviewer
6. The way the information is processed, either when answers are coded or when data are entered into the computer

As for my own experience when doing the interviews, I can definitely identify my interview experiences with this list. Firstly, I had some problems concerning questions that were poorly worded, however I explained the interviewee the true meaning of the question and corrected it so that the next interview would communicate better. Secondly I had issues with misunderstanding on the part of the interviewee. For example, quite a few of the interviewees did not know what the 100-meter belt was, thus resulting in time spent on elaborating this. Thirdly, I experienced memory problems on the part of the interviewee. This, especially regarding the questions that needed a level of agreement on the part of the respondent. I frequently had to read the response alternatives two times or more. Lastly, I experienced difficulties concerning the recording of the qualitative interviews with the CG and HM. In addition to taking notes, I recorded the two interviews on my iphone, using a special program created for this use. However, as it sometimes is when using

technological “gadgets”, the recordings were lost and I was forced to fully rely on my handwritten notes.

In addition I would like to add one source of error in addition to the list above. This is regarding my question to cabin owners whether there are obstructions on their property, which might be perceived as privatizing. I got the feeling that some of the respondents were hesitant when answering this question, which might indicate that they were afraid of the consequences to their reply, even though they were told the interview, would be completely anonymous.

#### **3.4.1 Telephone versus in person interviews**

There are several advantages doing interviews by telephone instead of in person, and vice versa. I chose to do the interviews with the cabin owners by phone, and there were several major reasons for this. Firstly, there was no way I would have the time, nor the resources to make these interviews in person, since the respondents were chosen randomly from a population scattered all over the country.<sup>20</sup> Secondly, though perhaps a minor reason, Bryman (2004) suggests that by doing interviews on phone, one does not affect the respondent’s answers due to the interviewers characteristics. For example, the respondent would not know if I would ask my questions wearing jeans and a t-shirt or a suit. This again might relate to class issues. For example, it is reasonable (though not always true), to believe that cabin owners at Hvaler are of upper middle class or higher, hence the very high real-estate value in the area. For that reason this could have significance in terms of response if I was to wear a pair of jeans and a t-shirt, rather than a suit. Nevertheless, the main reasons for doing the cabin owner interviews by phone was time, resources and the fact that the interview was quantitative, hence the advantages of short, precise and easily analyzed data.

I chose to do the interviews with the CG and HM in person. Firstly, this is because these interviews were mostly qualitative, hence requiring longer answers from the respondents in order for me to gain a greater perspective and context of the subject as well as leaving me the possibility to ask follow-up questions. Secondly, both the CG and HM were conveniently geographically reachable. Thirdly, research suggests that the quality of the data gathered from personal interviews is superior to that from the

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<sup>20</sup> The cabins are located at Hvaler, however the residence of the randomly selected respondents were geographically scattered

telephone interview (Bryman 2004). A respondent is more likely to answer, “I don’t know” or express no opinion when conducting phone interviews. I experienced to some degree that the cabin owners expressed no opinion were it was possible just because it was an easier alternative than actually having to weigh the alternatives up against each other.

All in all, I experienced the choice of interview forms to be successful, even though certain issues that might or might not affect validity occurred.

### **3.4.2 Secondary Sources**

This thesis makes use of secondary sources, hence other people’s research and literature within a specific field. I have, to the best of my ability, considered the source relevance and credibility by placing multiple sources against each other (Kjelstadli 1992, Yin 2003) for the purpose of strengthening the validity of the thesis.

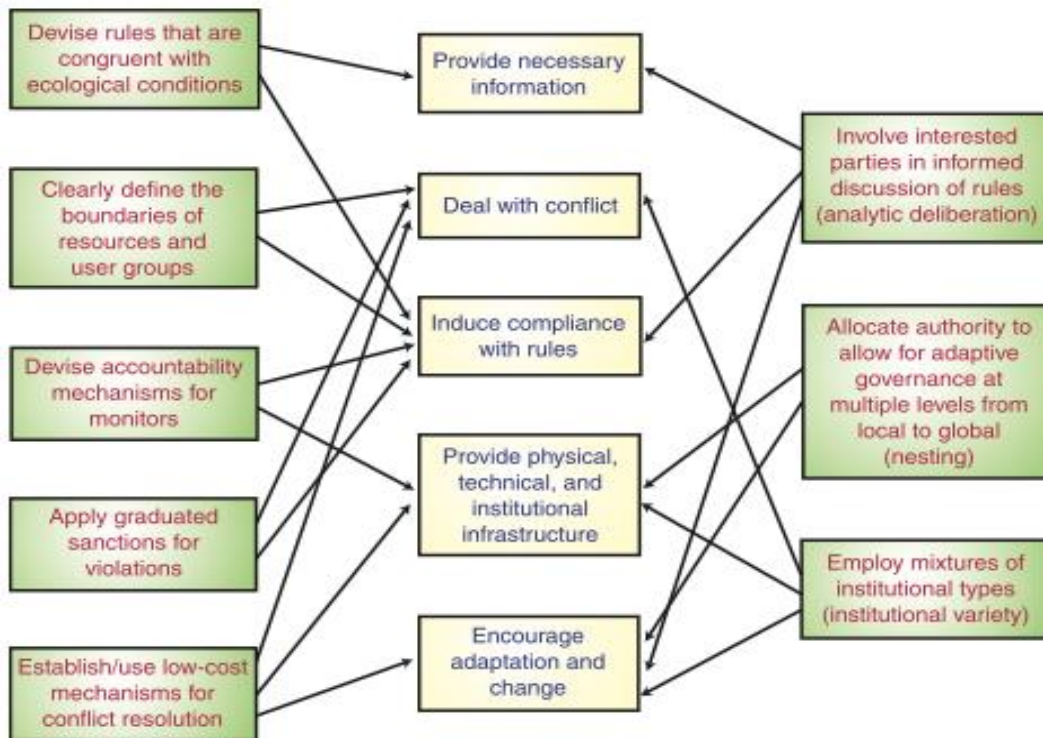
Most of the legislative texts were written in Norwegian, thus I was forced to translate them into English. I experienced some difficulty with this, since legislative texts often are linguistically complex. I did these translations to the best of my knowledge in order to represent the true meaning of the original texts and be understood by the readers.

## **4.0 Theoretical Approaches and Framework**

### **4.1 Environmental Governance**

For the purpose of this thesis, environmental governance is “*interventions aiming at changes in environment-related incentives, knowledge, institutions, decision-making and behaviors*” (Lemos & Agrawal 2006:298). Governance is not the same as government because in addition to the state, it includes the actions of communities, businesses, non-governmental organizations (NGOs) and their interrelation to the state. Norwegian national policies and regulation, local decision-making in HM and non-governmental environmental organizations like the Nature Conservation Association are part of a complex human ecosystem, were it is the sum and collaboration of these institutions and organizations that will ultimately decide the future of the 100-meter belt and the Norwegian coastline.

This chapter will mainly handle environmental governance with regards to central and local governance. However it will also deal with resource regimes and rational choice theory.



**Figure 16.** General principles (green) and governance requirements (yellow) for robust governance of environmental resources (Dietz et al 2003: 1910).

As illustrated in the figure 16, there are multiple principles with regards to environmental governance requirements. This specific figure states that in order to achieve a robust environmental governance system it is required to: (the yellow) Provide necessary information, deal with conflict, induce compliance with rules, provide physical, technical and institutional infrastructure and encourage adaption and change. Furthermore the figure expresses the importance of the principles (in green), to help to achieve the requirements. On the right: *Analytic deliberation, nesting and institutional variety*. On the left: *Devise rules that are congruent with ecological conditions, clearly define the boundaries of resources and user groups, devise accountability mechanisms for monitors, apply graduated sanctions for violations and establish/use low-cost mechanisms for conflict resolution*.

#### **4.1.1 Requirements of Adaptive Environmental Governance**

*Providing information.* Environmental governance depends on “good, trustworthy information about stocks, flows, and processes within the resources being governed, as well as about the human-environment interactions affecting those systems” (ibid: 1908). It is important to take local information into consideration, because this information is often based on first hand knowledge of an area through a long period of time. Such information may help identify future problems and develop solutions. Information to decision-makers must both be of high scientific standard as well as having the ability to be absorbed and understood. Furthermore it is important to provide information on uncertainties and values. The human built environment overlaps the natural environment and will result in uncertainties because this science is not complete. An important part of sound environmental governance is to focus on identifying such uncertainties and possible outcomes in order to prevent negative outcomes. In addition, environmental decision always require tradeoffs, thus information on individual and social values is required in order to understand effects of various valued outcomes. For example, when establishing a national park or a new municipality plan, this will probably affect stakeholders in the area, hence the importance of identifying individual and social values as well as uncertainties related to different outcomes.

*Dealing with conflict.* As environmental decisions are being made, the different values across stakeholders and interest groups will often result in conflicts. A conflict may be avoided if the authorities, stakeholders, environmental organizations and academics from multiple disciplines are involved in dynamic dialogues, which also take historical data into account. This seems important when laying the foundations of a new municipality plan, which decides further development and management.

*Inducing rule compliance.* Effective governance depends on that rules of resource use are followed. It is important that these rules are perceived as effective and legitimate by all resource users in order to obtain mass compliance. Hence a system, which is not perceived as effective and legitimate, will not be an effective system. This can be related to the rules and regulations cabin owners are under. A sense of unfair treatment with regards to dispensation applications might result in individuals build first, and ask for permission later. Much environmental regulation focuses on *command and control*, were violations are punished with fines or jail time. Such



enforcements are only effective when adequate resources are made available for monitoring and enforcement. However, as noted in this thesis with regards to biological diversity (the Musk Orchid and seabirds), there exist issues regarding either governmental will or funding. Environmental organizations suggest that in some cases there is a lack of will to protect, but HM states that there is a problem concerning resources.

*Providing infrastructure.* With concerns to this thesis, technological infrastructure and communication seems important. If information on biological diversity were mapped in such a way that the information was more conveniently accessible to both the HM administration and the public, sustainable environmental management would be more efficient. This can be linked to the Musk Orchid, where it is believed that one of the remaining localities were destroyed because of lack of available data. This will be further handled in the “Findings” and the “Discussion” chapter. Providing technological infrastructure might also prove effective with regards to monitoring resource violation. As of now, only one person is hired to oversee the seabird reserves in the county of Østfold, which is hardly enough. The reason for this could be either lack of will or lack of resources. Most likely the authorities will claim that they do not have the resources to implement a larger force to watch over the reserves. New technologic (e.g. web cameras) and improved institutional infrastructure are important in order to promote research and coordinate multilevel regulations between local and central governance, e.g. the RPR-O.

*Adaption and change.* It is important to design institutions, which are capable of adapting to social, biophysical and organizational change. For example, we have seen that pressure and human activity within the 100-meter belt has continuously increased since the original national building prohibition of 1965 was implemented. It is important to meet this pressure with adapting institutions that are in consistence with our increased knowledge on the present and future effects and outcomes of this environmental threat. As the society is constantly changing due to economy, population increase, management and scientific knowledge it is important to adapt and change the institutions accordingly.

#### **4.1.2 Principles for Meeting the Requirements of Adaptive Environmental Governance**

*Analytic deliberation:* A well-structured dialogue between scientists, resource users and the interested publics. This results in improved information, which will establish trust between the actors and ultimately help deal with conflicts in order to produce well-functioning governance rules. This can be linked to regulation plans within Hvaler Municipality, where affected individuals or parties should receive information on such a level that they may accurately represent and present their own utilities before a consensus is produced (ibid). This principle was also extremely important before establishing Outer Hvaler National Park. Because of the human activity within the park, it was important to inform all affected parties of the park restrictions and in addition let the parties express their opinions. Hvaler Fisher Union managed to remove some of the no trawling areas, which were originally suggested by the government to be implemented in the park.

*Nesting:* Dietz et al (2003) suggest that institutional arrangements must be complex and nested in many layers. Simple strategies based on one-level centralized governance to manage resources have been tried and failed. To govern the resources within the 100-meter belt in a sustainable way will need increased efforts to make centralized and local management to work in a “symbioses” which rely on clearly defined and working institutions.

*Institutional variety:* Governance should employ mixtures of institutional types like hierarchies, markets and community self governance in order to utilize a variety of rules to change incentives, increase information, monitor use and stimulate compliance. Hence, legislation evaders like resourceful cabin owners with expensive lawyers will have more trouble evading a multiplicity of rules, rather than with a single type of rule (ibid). It is very important to monitor and document how the evaders go about in evading the rules, so that new institutions can be created in order to ensure compliance. Hence, adaptive management is important, because evaders will always seek new ways to break rules due to the growing market value in coastal areas.

#### **4.2 The Government**

According to Acheson (2006: 123), governments generally attempt to preserve resources in two different ways: They buy large pieces of land to create national parks

and biosphere reserves and they pass laws and regulations to preserve resources. As governments can in many ways be perceived as a good thing, there are also examples on situations where this kind of management has caused tragedies. Governmental failure when it comes to the environment can be experienced when a government does not focus on environmental protection and when they do and fail. As the Norwegian government is highly concerned with environmental protection, I will focus on the latter; a government which focus on environmental protection, but fails.

Literature on governmental failure refers to agency problems as the most important reason for a poorly working government body (ibid: 123). Consequently, this refers to the government officials and politicians are driven by self-interest, instead of serving the public. If we research the goals and preferences of governmental officials and politicians they would on one hand probably read something like this: (Tullock 1994).

- Income
- Working hours
- Working Conditions e.g. office
- Power and class

On the other hand a bureaucrat would also most likely be interested in the good of the public. By looking at these suggested preferences of a bureaucrat, it is reasonable to believe that they might come in conflict with each other. This is not necessarily true in general, however it is a fair assumption that the possibility might be there.

According to Max Weber's abstract model of his ideal bureaucracy, formal organizational features have not been able to cleanse administrations for self-interest. There are both agency interest and personal prestige related to administrative responsibility. Such interest and prestige can make bureaucracy a pressure group for specific solutions that gives personal gain, rather than being a neutral organ which seeks out to promote the good of the society (Østerud 2003: 67-68)

From a pluralistic view, power should be dispersed throughout society. In other words this view supports that public participation in political processes through interest and pressure groups is healthy. Groups such as Hvaler Cabin Union, Hvaler Fisher Association and Østfold Nature Conservation Association allow individuals to express their preferences in political processes, which can be seen as a good thing.

However, another perspective of governmental failure can be observed through such interest groups or winning majorities, which influence the government to redistribute goods and services to them at the cost of the public (Acheson 2006). This can also be perceived as “rent-seeking.

Rent seeking can be explained with the extraction of special privileges from others, without making contribution to productivity. For example, a firm or an organization can finance a politician’s campaign, so that s/he wins an election. As a result, the politician has sold promises to the donators and the donators have ensured their views might be represented in political decisions. Hence, democracy is compromised because the politician might not represent the will of the people anymore, but the will of a firm or an organization.

#### **4.3 Public Policy – Elevates Pressure**

Many of our public policies elevate the pressures related to the coastal zone. Though not utilizing harm by intention, political structure often motivate behavior in the form of development, which puts the environment, as well as access rights, in danger (Beatley 2002).

Infrastructure is connected to development and is often provided under different governmental levels. While the intent of building larger paved roads and tunnels might be to prevent safer transportation for the inhabitants, it will also result in external effects like increased access to the coastal areas. This might again lead to increased property demand and therefore increased property value, making the economical gain possibilities in the area enormous.

A good example of public policy, which has led to increased pressure at Hvaler, is the Hvaler Tunnel. The tunnel was opened in the 2<sup>nd</sup> of October 1989 and is 3751 meters in length. The tunnel replaced a ferry, which was equipped to carry vehicles from Asmaløy to the centre of administration at Kirkeøy. No doubt the increased availability, as a result of building the Hvaler Tunnel, has led to more pressure on biological diversity and access rights at Kirkeøy. Consequently this is an example where Environmental Impact Assessments are important, because they analyze and determine every impact related to big projects like the Hvaler Tunnel.

Again one can ask one selves in terms of public policy and public choice, what were the bureaucrat's motives behind the tunnel construction? Public goods in terms of better transport safety and availability for the inhabitants? Better economy for the administration, resulting in job advancements, more power or better working conditions? This is of course only speculation, but raises interesting questions when it comes to rational choice theory -preferences, actions and outcome.

#### **4.4 Centralized Environmental Governance (Top-Down Management)**

*“Government agencies have a strong penchant for regulatory uniformity”* (ibid: 125).

As a result, top-down management might promote one set of rules for large areas that do not take into account varieties in local ecology (ibid). Governmental agencies have a good deal of power, which is often utilized over the preferences over local governmental units. This results in the two bodies being divided and finally creates hostility and opposition. As an example, the national policies and guidelines (RPR-O) promoted by the central government is not very well perceived by the politicians at HM because they are considered growth hindering. Consequently, this might also lead us to believe that the politicians actually argument against themselves, because the national polices and guidelines are there to preserve the very nature of what makes Hvaler a valued community in the first place; hence the unique environment.

In a top-down management situation, the scientists and engineers in governmental agencies tends to focus on the scientific and technical aspects of their jobs, not taking into concern local cultural concerns, stakeholders and most important; decades of experience when it comes to local management. However, this varies when it comes to different governments, and can be linked to the economic situation of a government. It is reasonable to believe that a developed country has the opportunity to allocate resources in order to create impact assessment reports, which identify the stakeholders and take them into consideration more effectively than a developing country.

Finally, top-down management *“frustrate rather than facilitate the local level and private efforts to provide public goods, including rules to manage resources”* (ibid: 126). Hence, by depriving local governments from experimenting with the ability to solve problems it will result in the local government being incapable of adaptive problem solving, which is important for facing new challenges. For example, if a

municipality is denied the ability to give dispensations from the no building legislation within the 100-meter, this might lead to the municipality not being able to identify were dispensation from plan might be preferable over regulation plans.

#### **4.5 Decentralized Environmental Governance (Local-Level Management)**

The autonomy HM as of today possesses is a result of decentralization of power from the central government to the different municipalities in the country.

A municipality can be understood as a geographically limited local political community, with some form of internal self-government. It lies almost in the nature of things that this can and should involve tensions in relation to the national level.

A Municipality by Norwegian standards can be seen as a public authority with three distinguished features: (Hagen & Sørensen 2003: 14)

- The municipality is responsible for a geographically limited area within the nation-state boundaries
- The municipality is responsible for the solution of one or more public tasks
- The municipality is governed by the local people through a direct democracy or the local elections of representatives to an assembly

An important aspect of decentralization is that public goods are made available in consistence with local preferences. In other words, different municipalities will have different public goods demands; hence the importance of local management and governance.

*“For a public good – the consumption of which is defined over geographical subsets of the total population, and for which the costs of providing each level of output of the good in each jurisdiction are the same for the central or the respective local government – it will always be more efficient (or at least as efficient) for local government to provide pareto-efficient level of output for their respective jurisdictions than for the central government to provide and specified and uniform level of output across all jurisdictions” (Oates 1972: 35).*

In Oates decentralization theorem, he states that local authorities will through their citizen’s preferences, create offers that reflects these preferences. The central government creates uniform solutions that entail the country as a whole, thereby not

maximizing welfare for citizens in areas that differ from the general welfare idea for the rest of the country. In other words - the municipality's offers are a compromise between local citizens' preferences; while the State's offers are a compromise between the general populations of the county's citizens' preferences (Hagen & Sørensen 2003: 14). Even though Oates' quote may be partly correct when it comes to maximizing local citizens' utility, environmental protection might tell an entirely different story.

Norway is a country with rich geographical variety resulting in the need for specialized management to some areas. For example, Hvaler and other coastal municipalities situated around the Oslo Fjord in southeast Norway are by far more exposed to development within the 100-meter belt, than municipalities located in less populated parts of Norway; e.g. the north of Norway.

Given these special circumstances, the central government has created a unique set of laws through the RPR-O, which promotes stricter protection of the coastline. This tells us that local governance when it comes to the protection of public access and the environment in certain geographical areas is not the pareto- optimum<sup>21</sup> for the general population. While a handful of people that have the financial incentives to develop property within the 100-meter belt will become better off, the majority has not and become worse off through loss of recreational opportunities.

Even though local-level management can be considered to be successful in many ways when it comes to preserving natural resources, there are also cases of failure. Acheson (2006: 127) states, "*Local-level efforts to conserve resources fail because the people of those communities either cannot devise rules to manage them or because the rules fail after they are established*". There is a growing agreement that the failure to devise rules can be linked to the characteristics of the communities. These characteristics can be identified with a *sense of community, social capital, social homogeneity, dependence on the resource, leadership, and secure boundaries* (ibid). An absence of such characteristics in a community might lead to ineffective conservation rules, depending on the case and the resource itself.

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<sup>21</sup> Pareto Optimality: It is impossible for one person to become better off without necessarily making someone else worse off

*Social Capital* can be explained with social interaction among a group of individuals to make up a unit. Hvaler is a fairly small community; hence one can argue that there exists a high accumulation of *social capital*, because everybody knows each other. This again might lead to an interesting and difficult predicament for the Hvaler administration, because they might have social relations with private persons that are seeking to exempt from the no building legislation. From my conversations with cabin owners, I got the impression that some of them believe that the reasons for individual exemption from the legislation is occurring because individuals have social relations with the administration. There is however little proof that social capital in this negative form exist at Hvaler and I will not suggest that it does. This is just to illustrate that according to some theories, such situations can occur, and as a result lead to failure in resource management.

Consequently this affects the *sense of community*, which is considered to be a key factor in solving communal action problems at the local level (ibid). The problem of cooperation might be connected to social and cultural factors that make it difficult for individuals to trust each other. For example, I have noticed a difference between real estate owners that originates from the local area and cabin owners which come from the area around the Norwegian capital; Oslo. In my opinion there exist a certain kind of grudge between these two groups, mostly from the locals for the outsiders. This is because locals are under the belief that the outsiders are rich and resourceful people, who can through their expensive lawyers do whatever they please in the 100-meter belt. As a result, the locals might deem the institutions for protecting the coast faulty or unfair, thus motivating them to break the rules themselves. Hence, a system that is perceived to be faulty will not be an effective one.

If the *dependence of the resource* is increased this will most likely result in the existing institutions, if any, will fail. In the case of Hvaler, *dependence on the resource* can be linked to the market for private recreational settlements along the coast. As people grow in numbers and private settlements along the coast do not (because of the general building prohibition), the market value for such real estate increases. There is a higher dependence on this resource, thus resulting in humans devising new ways of evading governance rules and institutions, as we have seen through the case of “Havtunet” and “Skjærhalden Rorbuer”.



Increase in population, new technology, and new markets can result in growing competition for resources and thus motivating individuals to not follow rules, invade other's resources or simply increase their efforts to farm the resource. The case of resource management at Hvaler can be linked to the factors of growing population and markets, due to the fact that Hvaler Municipality is located in the most densely populated region in the country and that there is a huge growing market for cabins by the sea. Because of the strict rules when it comes to building within the 100-meter belt, there will be built few new cabins, and in combination to a growing population and economy, this will result in a growing market for cabins by the sea.

Theories on resource management failure are numerous and as it turns out, it is difficult to generalize the reasons behind human's inability to handle environmental resources and to successfully point out the right way to deal with environmental resource management. There are both gains and losses related to central governing and local-management, so it is reasonable to believe that a combination of the two may be more successful. Furthermore, the level of combination must be utilized with regards to each individual case. In other words there is no golden highway one can follow to ensure successful environmental resource management.

Hvaler Municipality's decision-making is, though a result of decentralization, organized around a combination of both top-down and local management.

#### **4.6 The Relation Between Centralized and Local government in Norway**

The central Norwegian government's main responsibility is to finance the municipalities' assignments, while the municipalities responsibility is how to spend the resources in order to make ends meet. The municipalities do not possess much power to influence their income (Hagen & Sørensen 2003).

However, it is possible for the individual municipality to focus on expansionary expenditure policies that are related to rather optimistic views of next year's income. The outcome will be a financial crisis, which can only be solved by additional funding from the central government. The municipality can also neglect to focus on areas that are considered nationally fundamental, and as a result will create pressure on the central government through high media coverage. When the municipality neglects areas that are being considered nationally important, it may force the central government to give additional funding.

The central government is usually trying to counter municipal extortion, however it may prove difficult to determine whether a municipality's financial crisis is self-inflicted or not. By demonstrating a non-tolerant attitude towards such extortion, the central government is able to discourage such behavior and the municipalities have to solve the financial problems themselves (ibid).

#### **4.7 The Collective Action Problem**

In addition to theory on environmental governance, I have chosen to investigate some aspects of rational choice theory. This is not to reach any conclusion on how to deal with the issues in this thesis, but rather to try to explain the actions of some of the interest groups.

The core concept for traditional economical rationality defines it as maximizing individual utility. However, it is reasonable to "*perceive rationality as defined by the institutional setting within which choices are made*" (Vatn 2005:113). In other words the arena, whether the family, the marketplace or the policy arena represent different rationalities.

Collective action is necessary when a group has the opportunity or is required to work collectively in order to achieve some goal. Mancur Olson promotes in his work "The Logic of Collective Action" that it is frequently taken for granted that individuals with common interests usually try to promote those common interests (Hindmoor 2006:102). However, Olson argues that this is not always the case when it comes to non-excludable common goods, because collective action is compromised by a collective action problem (ibid). The collective action problem can be explained by individual belief that his or hers contribution will make little or no difference to the overall amount of the good provided and thus they may just as well receive the benefits from the contribution made by others. This is also known as the problem of "free riding". Consequently, this can be linked to the pressure groups represented in this thesis.

There are approximately 2200 members of Hvaler Cabin Union. Hvaler Cabin Union has worked out an oral agreement with Hvaler Municipality that all dispensation applications regarding cabin expansion because of water & sewer access will be approved. There are approximately 4700 cabins at Hvaler, meaning that 2500 cabin owners will benefit from the contribution of the members of Hvaler Cabin Union, and

thus can be considered to be free riders. As a consequence, this elevates pressure on the coastland even more than the cabin union intended in the first place. The cabin owners, which are not members of the union, are then part of a “privileged” group. A privileged group is a group where one or more individual value the good so much that they are willing to bear the entire cost on behalf of the group (Hindmoor 2006). Olson’s analysis of collective action assumes that individuals are self-interested and that if the opportunity comes, they will free ride. However, many individuals may contribute to collective goods because of social norms that are not outcome oriented, and not because of self-interest. Members of the Cabin Union might be members simply because they think they ought to because their families are members, or simply because it seems like the right thing to do. Joining the cabin union might lead to a sense of belonging to a group, and thus not concern personal gain in the sense of rationality theory.

Robert Wade presents another important aspect of resource distribution of common property with regards to the collective action problem. Wade argues that individuals are faced with the choice of “*either to cooperate with others in a rule of restrained access or to not cooperate*” (Robbins 2004:43). This line of reasoning suggests that each individual has a clear preference order of option: 1) Everyone else follow the rules and regulations, while the individual enjoys unrestrained access (he free-rides), 2) everyone, including himself follow the rules and regulations (he cooperates), 3) Nobody follow the rules and regulations except for him (he is “suckered”), 4) Nobody follow the rules. (ibid: 43). Let us imagine that the individual in this scenario is a cabin owner that wishes to expand or enhance his property. According to rational choice theory his optimal choice would be number one, to break the rules and let everybody else follow them. As illustrated in figure 17, this choice equals “4,1”, where 4 represents his gains, and 1 represent the other’s, hence he wins 4 to 1. His second choice would be number 2; everyone else, including himself follow the rules and regulation. This is represented in figure 17 as “3,3”. His third and worst choice would be to follow the regulations, while nobody else does, which illustrated in figure 17 as “1,4”. The Fourth option will be if both the cabin owner and the others defect, which represents a “2,2” outcome.

		The Other Cabin Owners	
		Follow rules	Defect
Cabin-owner	Follow rules	3,3	1,4
	Defect	4,1	2,2

**Figure 17.** The cabin owner’s dilemma. (Cabin owner’s preferences with regards to building restrictions, based on prisoner’s dilemma game theory).

The reason as to why this adaption of the prisoner’s dilemma is relevant to the thesis is because both actors have dominant strategies. A dominant strategy is a strategy that is best for a player no matter what strategy the opponent chooses. It should also be noted that this adaption of the prisoner’s dilemma is based on ordinal preferences, which tells us the ranking of the four options in relation to each other and not the distance between them.

The order of the four choices above will change depending on what the cabin owner knows about the other’s intentions, hence the anticipation of the actions of the others. If for example a cabin owner believes that the other cabin owners do not follow rules and regulations, why should he? Likewise, if he knew the others followed rules and regulations, he may believe that his actions alone, when not following the rules, would not have an effect on public access and the environment, hence free-riding. Another issue, which might affect a cabins owner’s choices, is how he perceives the rules and regulations and how they are managed. For example, if the cabin owner thinks the rules and regulations are fair and that every cabin owner is similarly treated be the Municipality, he might choose to follow the rules like everybody else.

This view takes a step away from rational choice theory were all individuals are perceived driven by self-interest, and suggests that there may be other factors like norms and values which drive human actions. Likewise, if the cabin owner believes that the decision-making by the Municipality is unfair, and that cabin owners are treated differently, the cabin owner may choose to defect from the rules.

#### **4.8 Resource Regimes**

According to Vatn (2005:260), a resource regime consists of two different elements: “(a) *property regime that governs the use and transfers of the rights to a resource, and (b) the rules that govern the transactions concerning the results from using the resource*”.

According to Vatn (2005), literature distinguish between four property regime types:

1. Private property
2. Common property
3. State (public property)
4. Open Access

In other words the theory suggests that the different property regimes may want to conduct transactions between each other regarding the resources linked to the property they hold. Thus the question of transaction costs comes into play, which will be discussed in detail at a later point in the theory chapter.

##### **4.8.1 Institutional Resource use**

Vatn (2005: 252) believes the institutional resource use can be divided in three:

1. Resource distribution –Who gets access to what resources
2. Transaction Costs – The costs in relation to running institutions for the individual or common use of a resource
3. Regime Effects – How problems regarding the regime is perceived, which interests it defends and the values it promotes

One definition of an institution that suits the use for this thesis is: “*the rules and conventions of society that facilitate coordination among people regarding their behavior*” (Vatn 2005: 10). Thus institutions can be considered to be everything from legislation to human behavior

The use of one resource will ultimately have an effect on another. Consequently this means that development and building within the 100-meter will at the end of the day affect the distribution and the resources involved; explicitly the right of access and the biological diversity.

When it comes to managing the issues surrounding resource distribution in the 100-meter belt there are transaction costs to be taken into account. Economically speaking, this means the costs of keeping different agents (stakeholders) and their uses apart (ibid: 262). Hence, there is a certain amount of cost involved with generating and upholding the institutions that are in work when considering the management of coastal areas, taking the different agents into consideration.

#### **4.8.2 Property Rights**

Property rights define who has access to which resources and under which conditions. In other words: The distribution of resources between members of the society and regulation of conflicts. This thesis research the conflict between access rights within the 100-meter belt; hence the access rights of private property owners (cabin owners) and recreational access rights of non-property holders. Therefore property rights are not only about a cabin and the surrounding estate, but also social relations like free for all access to the 100-meter belt (Vatn 2005). Consequently, a piece of land may offer multiple benefit streams.

While cabin owners have ownership over the real estate, the ownership is regulated with certain rules applied in the 100-meter belt. As noted in the PBLn, there are certain restrictions concerning the use and renovation of cabins e.g. color, window sizes and the overall size of the cabin itself. Hence, saying that something is privately owned is rather diffuse. Bureaucrats within the municipality utilize the regulations concerning private property within the 100-meter belt. Hence one can actually say that private property is in fact not 100% private property, but a mixture of private property and common property, since the legislations promote access for the general public on the expense of the private landowners. This can be related to the Herføl verdict, which was mentioned in the introductory part of the thesis.

As mentioned, literature distinguishes between four property regime types: Private property, common property, state property and open access. Whereas the rights concerning private property are commonly thought of as in possession of one individual, rights regarding common property is in the hands of a group of people. State property is in the hands of the state; while open access is free for all, e.g. no property ownership what so ever. If we look at a cabin and its surrounding land within the 100-meter belt, a private person can privately own it. The individual that possess

this real estate is granted certain rights and obligations concerning the use of the real estate. Similarly the inhabitants of the municipality and the inhabitants of Norway (the common) have rights regarding free access. Here lays one of the essential issues concerning the thesis; whether an individual can exclude others from the benefit streams of the resource in question.

#### **4.8.3 Common Goods and Common Pool Resource Theory**

A common good can be explained as a good that is rivalrous and non-excludable. In other words, this basically means that the good in question, if consumed by one individual, will result in reduced availability for others. Similarly, a glass of water is considered to be rivalrous and excludable, because if consumed by an individual the result would be no more water for others. As for a river, the complexity of the matter increases. Because water can be considered to be a highly fluid resource (in many ways), it can be difficult to define it as non-rivalrous or rivalrous. As for this thesis; the question of privatization and development of a coastal area in Norway, the coast can be considered to be rivalrous, because one consumer (cabin owner) might prevent simultaneous consumption by other consumers (outdoor users) and non-excludable because it is not possible to prevent people who have not paid for it to enjoy the good. In many ways it is the legislations that make the coastal land non-excludable, because such recreational land, according to Norwegian mentality, should be available to everyone and not just a privileged elite.

The coastal areas surrounding the Hvaler archipelago are not something that is produced, hence cannot be defined as a public good in that sense. However, because of its scientifically proved recreational traits, the question whether this good should be consumed/enjoyed by a few or all comes at hand. In addition, it is written in The Outdoor Recreational Act of 1957 that outdoor recreational activities should be preserved and safeguarded for the public. In other words it is law-written by the state of Norway, that areas, which induce recreational traits, should be considered a public good that serves the community. However, due to individual rights, decentralization and privatization, these issues often result in a two-sided dagger in a matter of speaking. As shown in previous chapters of the thesis, different acts and laws oppose each other in order to represent the different actors in play; e.g. cabin owners vs. outdoor users. So what we have here in essence is private goods, that are excludable

and rivalrous, constructed on common goods, which are rivalrous and non-excludable, hence the amount of conflicts related to coastal management.

The general perspective of a public good is that it is something produced by the government that can be utilized by all its members of society. For example, national defense is a public good for citizens of a country, because the consumption of one individual will not reduce availability of the good for consumption by others (figure 18). Similarly, coastal land, which is bought by the government for public usage, such as recreational beach areas like Storesand at Hvaler is a public good. However, when dealing with coastal issues like this, one can say that such a public good is not only produced by the government, but also protected by the government for the benefit of all its citizens. This, on the other hand, raises the question as from what it is protected from? As Adam Smith has explained in his works, free marked forces will automatically maximize resource Pareto optimum<sup>22</sup>. In the case of privatization of the 100-meter belt, the only individuals that will become better off are the people gaining from accessing private land, and individuals that have no ownership and seek out to utilize the land for its recreational traits. In that case, the marked can be perceived as inefficient, because the result in general favors an elite force of the society, which can afford the steep real-estate prices within the coastal zone.

It is reasonable to assume that unclear property rights result in conflicts. When dealing with common property regimes, multiple agents may want to utilize the same benefit stream, thereby influencing the opportunities and benefits for some. Thus it would be easy to conclude that private property would be the only feasible solution, since every agent would be able to protect the goods of their efforts. However, to conclude with this would be misleading since the real world involves multiple resource regimes in addition to private property. Keeping this in mind, we can conclude that there exist high costs of keeping different agents and their uses apart if the resource regime is rivalrous (ibid).

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<sup>22</sup> Pareto efficiency in the sense that one person becomes better off, while no one else becomes worse off



**Exclusion costs (Tcs)**

**Low**

**High**

	<b>Excludable</b>	<b>Non-excludable</b>
<b>Rivalrous</b>	<b>Private Goods:</b> Cabins on coastal recreational land	<b>Common Goods:</b> Coastal recreational land
<b>Non-Rivalrous</b>	<b>Club Goods:</b> Satellite television	<b>Public Goods:</b> Air, National defense, State owned coastal recreational land

**Figure 18.** Characterization of resources or goods according to costs of exclusion and rivalry in use or consumption (Adapted from Vatn 2005).

Exclusion costs imply the cost of dividing the good into individually owned parts. As noted, common goods are difficult to allocate, thus resulting in high exclusion costs. I have defined recreational land as a common good in this thesis, which makes sense because of the Norwegian mentality and legislations (The Recreational Act) that seeks to ensure the public access to such areas.

Consequently the table above illustrates that there are high exclusion costs related to coastal recreational land, because of what can be explained as private property (cabins) within common property (land which is by Norwegian law ensured public access). In other words, when a cabin owner seeks to expand his property there exist high exclusion costs in doing so: Applying for dispensations (perhaps using lawyers) and the following legal processes, which entails the HM administration and even higher authorities like the CG. Consequently this relates to theories presented at the beginning of this chapter that explains the importance of robust environmental resource management.

## 5.0 Findings

### 5.1 Coastal Legislation

#### 5.1.1 General Coastal Management

The CG and HM stated that there was a large amount of development of new buildings within the 100-meter belt from 1965 to 1975. However after the local building prohibition at Hvaler in 1974, development decreased and mainly focused on development of existing building mass, e.g. cabin extensions. Furthermore the foundation of RPR-O in 1993 led to even less building within the 100-meter belt and the beach zone. Due to the fact that a lot of cabins are given the opportunity to get access to a water and sewer system, they are given dispensations to enlarge their cabins in order to make room for bathroom facilities. Most of the dispensation applications are related to such extensions<sup>23</sup>

#### 5.1.2 Dispensation

According to the CG, decentralization of decision-making to HM has resulted in decreased public access to the 100-meter belt due to dispensations. The CG's understanding of the situation, is that there are no single large projects built as a result of dispensation, but it is the piece-by-piece building that results in decreased public access to the 100-meter belt. This can be observed through the many dispensations given for cabin extensions due to water & sewer access. The CG does not think that HM has changed their practices when handing out dispensations, but dispensation practice has rather varied through political majority. The CG told me that the general experience they have had when it comes to dispensation applications within the 100-meter belt, is that the politicians in HM are positive into approving them, while the administration is negative. HM states that the administration finds the guidelines from the Ministry of the Environment regarding coastal management both rational and sensible, however the politicians perceive them as unreasonable and a general growth-hindrance for the municipality<sup>24</sup>.

I asked both the HM and the CG to what degree they agreed that there is a mutual understanding between them when it comes to how cases within the 100-meter belt

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<sup>23</sup> Interview, Hvaler Municipality 10.02.2009, Interview The County Governor 18.02.2009

<sup>24</sup> Interview, Hvaler Municipality 10.02.2009

should be handled. Both parties completely agreed, however they did have some additional opinions to add: The CG informed me that they completely agreed to that there is a mutual understanding with the administration of HM, but not the politicians. Additionally, HM said that a good cooperation with open channels are present, however there is a problem concerning the politicians and the CG<sup>25</sup>.

Furthermore, I asked both the CG and HM to what degree they agreed that there is much communication between the HM and the CG when it comes to coastal zone management within the 100-meter belt. Both parties completely agreed that there is much communication between them<sup>26</sup>.

HM informed me that most dispensation applications are connected to recreational buildings (cabins). As a main policy there should be given no dispensations that may result in further privatization of the 100-meter belt, however there are certain exemptions. For example, HM generally allows dispensation from the no building legislation, when it comes to water and sewer expansion. This is because it seems more environmental friendly to be connected to the water and sewer system, as well as it gives the municipality additional income. However, the HM often requires applicants to meet certain conditions before allowing cabin owners to expand their cabins in order to connect to the water & sewer network. As a main rule, a dispensation or a “special reason” must result in a positive outcome for the public. Consequently an applicant will have to give up something in order to gain something. In many cases a small extension in order to connect to the water & sewer network is only approved if an outdoor toilet or a small outhouse is demolished (should such buildings exist on the property). In addition the extension should only be built facing away from the sea, and placed in such a way that it does not decrease public access in the area. By demanding such conditions, HM maintains individual landowner’s rights, as well as protects public access and recreational activities. President of Hvaler Cabin Union expressed the importance of their battle for allowing all cabin owners at Hvaler

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<sup>25</sup> Interview, Hvaler Municipality 10.02.2009, Interview The County Governor 18.02.2009

<sup>26</sup> *ibid*

the opportunity to access the water & sewer network. Without their work, it would be much harder for the individual cabin owner to achieve water & sewer access<sup>27</sup>.

In relation to dispensation when it comes to water & sewer access, the CG expressed the importance of invisible piece-by-piece development. Hence it is the total amount of developed land within the 100-meter belt, that tells us something about the increased privatization and decreased public access. For example, if 100 applications for cabin extension in order to access the water & sewer system are approved per year, and each of these extensions equals 10 m<sup>2</sup>, this means that a total amount of 1000m<sup>2</sup> of the 100-meter belt is privatized each year. This is just to prove a point, and there was no actual data on the matter available to me when I did my fieldwork for this thesis. One can also say that this will not deteriorate public access because these extensions are built into already existing building masses, and in addition built facing away from the sea. Also, when such dispensation applications are approved, other buildings on the property such as outdoor toilets are demolished. Consequently, most of these extensions are being located in such ways that they have little meaning to public access or esthetical values. Generally these cabins lie close together, thereby not decreasing public access much. The CG and HM expressed the importance that expansions on cabins that are located in solitary are much stricter.

Both the CG and HM state that all dispensation applications are sent to the CG for statements according to the given guidelines (see appendix 5). However, the CG said that to their knowledge, one dispensation application had provided the wrong location of the cabin<sup>28</sup>.

When it comes to what degree HM sends dispensation applications to the CG for statements, the former answered “almost every time”, while the latter “every time”. It should be noted that the question did not specify dispensation applications within the guidelines (appendix 5), and should therefore not be thought of as breaking the rules in any way<sup>29</sup>.

### *Special Reasons*

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<sup>27</sup> Interview, Hvaler Cabin Union March 2009

<sup>28</sup> Interview, Hvaler Municipality 10.02.2009, Interview The County Governor 18.02.2009

<sup>29</sup> *ibid*

As mentioned, the most common dispensation applications are related to bathroom facility expansion. This is listed in PBLn § 7 and opens up for exemption from the no building prohibition due to “special reasons”. Both the CG and HM have no document defining what “special reasons” really are. The CG stated that it is up to HM to assess “special reasons”<sup>30</sup>. HM stated that “special reasons” are assessed regarding social reasons, hence what the society gains when a dispensations application is approved<sup>31</sup>. Regarding expansion related to bathroom facilities, the CG stated that demolition and construction of cabins of better appearance are common examples for “special reasons”<sup>32</sup>. Accordingly, there are certain conditions the applier must fulfill in order to get such applications approved. These conditions must benefit society and usually compel the applicant to e.g. tear down existing outdoor toilets, change the color of the cabin or tear down smaller piers for the benefit of larger common piers.

To my question; “Do HM feel that a special reason is when a construction is not having a negative outcome on the environment and public access?”, HM answered “no”, and that there has to be a majority of reasons in order to fulfill “special reasons”<sup>33</sup>.

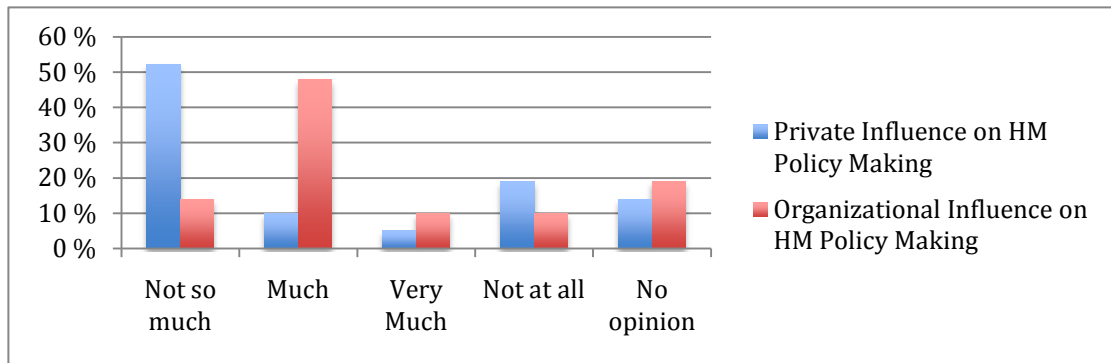
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<sup>30</sup> Interview, The County Governor 18.02.2009

<sup>31</sup> Interview, Hvaler Municipality 10.02.2009

<sup>32</sup> Interview, The County Governor 18.02.2009

<sup>33</sup> Interview, Hvaler Municipality 10.02.2009



**Chart 1.** Cabin owners' (members of the Cabin Union) opinion on to what degree a private person and their organization can influence Hvaler Municipality's policy making<sup>34</sup>

Pål Bugge, President of Østfold Nature Conservation Association, stated that private persons have very much influence and that his organization has not so much influence over HM's policy making<sup>35</sup>.

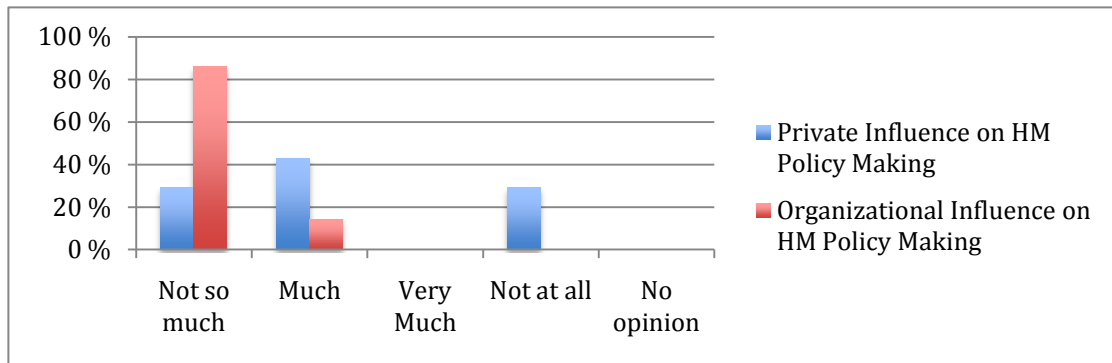
The President of Hvaler Cabin Union stated that his organization has very much influence over HM's policy making. He explains that it is relatively easy to obtain dispensation from the no building legislation when installing water & sewage due to the work of his organization. He says there is an oral agreement between the Cabin Union and HM that every dispensation application regarding cabin extension due to water & sewage connection will be approved<sup>36</sup>. Chart 1, which represents the opinion of the cabin owners, supports the president's views; approximately 50% answered "much" and 10% "very much" to what degree they agreed that their organization could influence HM's policy making. The chief advisor of HM, Torleif Gjellebæk states that pressure against building is hardly present, but pressure for building is noticeable through resourceful applicants, which use skilled lawyers and advisors<sup>37</sup>.

<sup>34</sup> Interviews with cabin owners 18.02.2009

<sup>35</sup> Interview, Østfold Nature Conservation Association March 2009

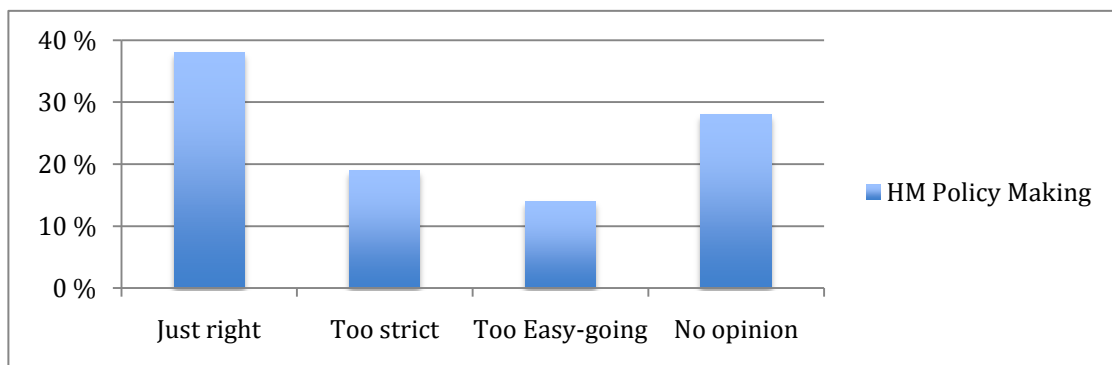
<sup>36</sup> Interview, Hvaler Cabin Union March 2009

<sup>37</sup> Interview with Torleif Gjellebæk, Hvaler Municipality May 2009



**Chart 2.** Fishermen’s opinion on to what degree private persons their organization (Hvaler Fisher Union) can influence Hvaler Municipality’s policy making<sup>38</sup>

When it comes to the fishermen, 86% believed that their organization Hvaler Fisher Union had “not so much” influence over HM policy making, while 14% answered much. President of Hvaler Fischer Union answered “not so much”, and believed that their influence as an organization can be seen in relation to the political majority within the municipality. Hence, the amount of pressure the pressure groups can apply is dependent on the political color of the municipality.



**Chart 3.** Cabin owners’ opinion on Hvaler Municipality’s policy making when dealing with building within the 100-meter belt<sup>39</sup>

27% of the cabin owners I interviewed had had some kind of dispute with Hvaler Municipality. 83% of these cases were disputes related to dispensations. Hvaler Municipality rejected 80% of these dispensation applications. From my interviews with both the president of Hvaler Cabin Union and HM, I got the impression that obtaining a positive outfall of a dispensation application related to water & sewer access was fairly easy, as long as the outcome was constructive on the society. Hence,

<sup>38</sup> Interviews with fishermen, 9th of April 2010

<sup>39</sup> Interviews with cabin owners 18.02.2009

it is reasonable to believe that the disputes of the 23% of the cabin owners were not related to water & sewer access, which is the most frequent dispensation application<sup>40</sup>. In addition, chart 3 demonstrates that cabin owners are in general satisfied with HM's policy making. Just under 20% believed that HM were "too strict" when dealing with building within the 100-meter belt. In fact, close to 15% of them believed that they were too "easy-going". The Nature Protection Association believed the policy making to be "just right", and said the municipality is trying to be strict when it comes to building within the 100-meter belt. However it should be noted that when I asked the question about HM's policy making, many respondents made a point that it is unfair treatment that is most unsatisfactory, not general policy making.

### **5.1.3 Municipality and Regulation Plans**

HM stated that there has been building activity (through regulation plans or building areas in the municipality plan's land use section) within the 100-meter belt to a pretty large degree, the last 5 years. HM explained that typical reason for this kind of expansion is in order to promote commercial business and population basis<sup>41</sup>. Furthermore HM expressed the importance that these areas are related to existing structures and that no new areas have been "punctured". Also, buildings for residential purposes are regulated for construction behind the 100-meter belt. According to HM the CG has not had any objections to regulation plans the last 5 years, which the CG confirms<sup>42</sup>. According to HM, the process never goes as far as to where the CG objects to regulation plans within the 100-meter belt. This is because the CG sends out a notice of objection, and through the hearing phase, the plan is modified accordingly<sup>43</sup>.

When it comes to opening up for building in relation to promote commercial business and population basis, the CG said that these are central issues, which to some degree involves "grey areas" in the law. Furthermore the CG stated that the municipalities and the state/county are generally more easy-going when it comes to commercial projects like "Havtunet", thus many of these are incorporated into the municipality

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<sup>40</sup> Interview, The County Governor February 2009

<sup>41</sup> Interview, Hvaler Municipality 10.02.2009

<sup>42</sup> Interview, Hvaler Municipality 10.02.2009, Interview The County Governor 18.02.2009

<sup>43</sup> *ibid*



plans. When areas like “Havtunet” are built and when they are up to their necks in debt and bankruptcy is approaching, it results in pressure on the law and the politicians to find solutions. The Sectioning Act does not interfere with PBLn and everything can in principle be sectioned if it meets certain technical requirements<sup>44</sup>. If a section number is obtained, one can open up for private sale and thus makes it next to impossible for the municipality to follow up possible clauses. The CG said that it is possible to see these sales as being done under false pretensions, but there is virtually no control management involved, and many buyers do not seem to care when the object for sale is attractive enough<sup>45</sup>. The CG also believed that they must be more skeptical to all regulation within the 100-meter belt. In some cases where dispensation applications are denied, a major player with a good architect might be able to persuade into regulating an area instead of getting dispensations. Furthermore the CG said that they have, in previous occasions, granted dispensations from plan to smaller actions because it is not desirable to regulate the area – a new plan would be more extensive and might result in more buildings like piers and boathouses, as observed with the case of “Havtunet”. The President of the Nature Protection Association in Østfold stated: *“Had Hvaler Municipality known about the difficulties involved with the sectioning in this particular case, they would never had sanctioned the project in the first place”* (Fredrikstad Blad 2003).

Currently, Hvaler municipality plan for 2009-2021 is under construction. The municipality plan has been constructed with regards to the revised Plan and Construction Act and a new County Plan, which has led to a considerable amount of challenges, since these new documents were implemented at the final stages of the municipality plan. Overall the CG believes the municipality has done a good job customizing the plan with regards to the new restrictions. However, due to regional and national considerations, they still believe the plan has deficiencies in key areas (The County Governor 2009).

The new County Plan provides for a reduction of scattered settlements in all the cities and coastal municipalities. HM’s upper limit when it comes to scattered settlements is set at 10%, where as the suggested municipality plan is arranged so that 25% of

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<sup>44</sup> Interview, The County Governor 18.02.2009

<sup>45</sup> *ibid*

residential development can be built scattered. The CG believes that this kind of development will break up the distinctive landscape at Hvaler (ibid). Furthermore the CG believes that this trend is already at a level, which suggests that such development must be kept at a minimum (ibid). The CG believes that a sustainable and future oriented Hvaler is entirely dependent on a vibrant municipality center at Skjærhalden (ibid). In addition, increased scattered development will put unnecessary strain on infrastructure. A scattered development will result in individual car-use, instead of collective transport. This will also result in increased strain on traffic security, as more vehicles will enter the roads (ibid).

In the CG's opinion, the new municipality plan opens up for a dispensation practice, which will result in increased opportunities and expectations when it comes to building within the 100-meter belt. In the new municipality plan, the dispensation guidelines are replaced with specific conditions, which if fulfilled, will grant exemption from the overall regulation plan requirement. The new conditions go a long way in giving technical specifications for building, which might be perceived as facilitating further development, which is in contrary to the main considerations when it comes to outdoor recreation and the 100-meter belt (ibid). In addition, they are also in contrast to the general building prohibition within LNF-areas, because the main purpose behind LNF-areas are "punctured" by the small building circles situated around all houses and cabins. The new municipality plan also suggests building circles around settlements that are located within the 100-meter belt, which previously only entailed buildings situated behind the 100-meter belt and within the beach zone (up to 300 meters). The CG believes that the building circles system will further facilitate a procedural process, which does not involve dispensation from the building prohibition in neither LNF-areas nor the 100-meter belt (ibid). This will result in increased opportunity to expand all cabins in the municipality, which will as a consequence lead to a stronger piece-by-piece building than before and thereby continuously change the character of the coastline (ibid).

As a result of new opportunities to water and sewer access, it is noted that the cabin usage is now increasing significantly, and that the cabins are upgraded to house/villa standards. As a consequence, such settlements will increasingly dominate the coastal zone at the expense of the landscape and accessibility (ibid).

Furthermore the CG expresses concern when it comes to the new municipality plan and outdoor recreation, tourism and harbors. The plan entails little information on areal management and recreational activities such as beach and boat-life, while at the same time it regulates large areas to harbor and tourism facilities. Harbor building is extremely space demanding and results in stress on the fragile environment within the 100-meter belt. The CG believes that the demand for boat parking is close to insatiable, and will result in increased pressure on roads and infrastructure and is considered a strain on biological diversity when it comes to noise and pollution (ibid). The CG believes that HM needs clearer guidelines for planning the harbor areas, and that the plans should focus its aims on meeting the communities demands without compromising the natural and cultural environments, which make up the archipelagos identity (ibid).

In addition to the protests against the new municipality plan that are mentioned above, the CG states the necessity of an environmental impact assessment, which present the overall impacts of the new plan.

## **5.2 Biological Diversity**

### **5.2.1 The Case of the Musk Orchid**

President of Østfold Botanical Union, Jan Ingar Båtvik stated that HM has, to his knowledge, never taken the musk orchid into consideration and that they have never paid much attention to endangered species in general. Furthermore he said that many within HM probably have heard that there exist numerous species in the area that are red listed, but that he has not seen much attention directed to this through debates, case studies or regulation plans. *“I have a feeling that the municipality’s endangered species have been a blind spot or something that has been pushed aside, instead of being proud of such resources, nurture them, use them for tourist purposes and make them available for people to experience and learn more about, portray the municipality as the municipality in Norway that has the highest amount of red-listed species compared to its size etc”*<sup>46</sup>. In addition, Båtvik stated that when Erik Solheim, the Minister of the Environment, assigned Hvaler the position of being the only known place in Norway harboring the musk orchid, the Mayor had not even heard about the plant. It may be that HM has expanded their knowledge surrounding the

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<sup>46</sup> Interview with Østfold Botanic Union 24.06.2009

musk orchid since then, but this kind of ignorance towards a specie that are on the verge of extinction should not be taken lightly<sup>47</sup>. Finally Båtvik said that HM has done nothing in order to save or protect the musk orchid at Hvaler. With the exception of botanists and people with special interest that frequently survey the musk orchid populations, the only ones that have done something for the fragile plant is the environmental department at the CG's office (ibid). *"The people at the County Governor's Office have always tried to follow up with measures, and tried to stop the most serious violations done by Hvaler Municipality and land owners"*<sup>48</sup> Geir Hardeng at the CG's office told me that he did not have any knowledge about how the parking lot, which destroyed one of the remaining four Musk Orchid localities. However, at the time when the parking lot was first created (mid. 1980s), no data on biological diversity was available digitally<sup>49</sup>. HM told me that there is no overview (in list form) of the red listed species that exist at Hvaler, but there has been carried out registration and mapping of biodiversity within the municipality in 2007. This material is in the HM's digital maps and can be utilized by the executive officers responsible for dealing with applications and regulations<sup>50</sup>. President of the Nature Conservation Association at Hvaler told me that resources allocated to the municipality for creating environmental positions within the municipality are being utilized for something else<sup>51</sup>.

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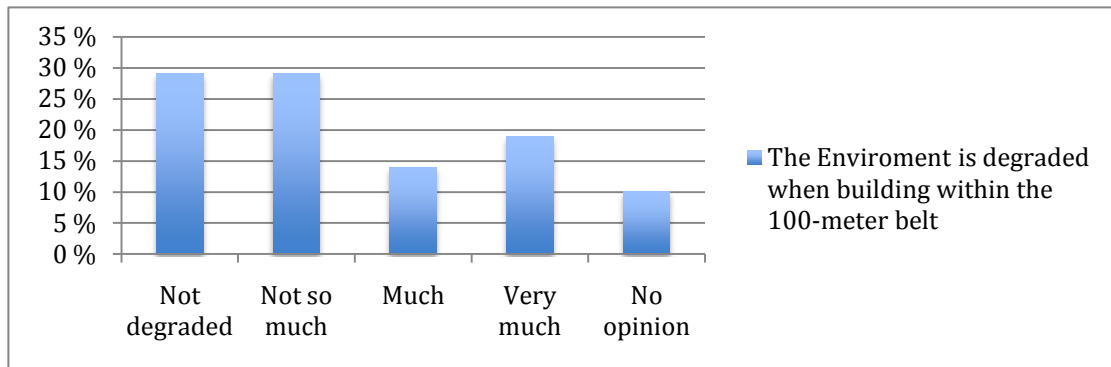
<sup>47</sup> ibid

<sup>48</sup> ibid

<sup>49</sup> Interview with Geir Hardeng by email, the County Governor's Office 24.06.2009

<sup>50</sup> Interview, Hvaler Municipality 10.02.2009

<sup>51</sup> Interview, Hvaler Nature Conservation Association March 2009



**Chart 4.** Cabin owners' opinion on to what degree the environment is degraded as a result of building within the 100-meter belt<sup>52</sup>

As for the Musk Orchid and other threatened species at Hvaler, population growth and human expansion can be considered to be the biggest menace and enemy. We have seen through the case of the Musk Orchid that already one locality has been destroyed due to the construction of a parking lot; thus humans demanding new areas for usage. Accordingly, chart 4 reveals that just under 60% of the cabin owners believes that the environment is either not degraded, or not so much degraded when building within the 100-meter belt. This would indicate that they either do not have any knowledge about the state of biological diversity at Hvaler, that they know about it, but do not think it is degraded or that they know about it, but find it less important. Either way, this can be perceived as alarming because at the end of the day it is groups like cabin owners that constitute pressure on the local environment. As a comparison, both Bugge and Ådnem with the Nature Conservation Association stated that the environment was “very much” and “much” degraded as a result of building activity within the 100-meter belt.

### 5.2.2 Seabirds

With intentions of discovering a connection between decline in seabird numbers and increased development around the Hvaler Islands, I talked to Per-Arne Johansen who has been counting seabirds around the Hvaler area since 1989 in cooperation with the CG.

In response to my question if the decline in seabird numbers could be seen in relation to increased boat traffic in the area, Johansen stated that for some species this would be the case. The species that are most affected by the increased boat traffic are the birds that lay their eggs and have offspring from June and on. The reason for this is

<sup>52</sup> Interviews with cabin owners 18.02.2009

that these months are summer-season months were the boat/tourist rush is at its highest. On hot summer days, many boaters go ashore, which result in parenting birds leaving the nests, leaving fragile offspring or eggs at the mercy of the hot sun (ibid). In most cases this will entail small or medium sized islands, because birds will not lay their eggs or offspring on larger islands due to predators like the fox or the badger.

To my question about his thoughts around state rules and regulations when it comes to the protection of seabirds he answered that the enforcement of overseeing bird reserves in the county of Østfold is in the hands of one person. In other words, it is up to one single person to control bird reserves situated along 1248 km of coastline<sup>53</sup>. The work that Johansen has done in cooperation with the CG has led to the construction of new reserves in areas were found necessary, however the extent and success of supervision of these reserves may be open for discussion. As many other issues surrounding environmental protection and biological diversity, there is simply not enough resources allocated from the authorities to result in successful management.

### **5.2.3 The Fishing Industry**

According to Jan Gunnarsen, President of Hvaler Fisher Union, the amount of fish species utilized for human consumption has decreased dramatically over the years<sup>54</sup>. According to Gunnarsen there are multiple reasons for this decline. Firstly, the water from the river of Glomma has been transporting pollution from the factories situated up-stream. Restriction on pollution from factories have become much more strict the last decade, however ecosystems are known to need much time to restore themselves. Secondly, Gunnarsen told me that there is a connection between fish decline and human expansion with regards to building within the 100-meter belt and along the coastline. As cabins are utilized over longer periods than before due to enhanced cabin standards (water & sewer access), more boats roam the sea over a longer period of time than before. In addition, the increased tourism around summertime will result in more boat traffic and as a consequence have an affect on biological diversity. Gunnarsen believes that especially the increased boat traffic in shallow waters will disturb fish fry when they are at their most vulnerable stage. However, some of the

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<sup>53</sup> Interview with Per Arne Johansen (bird watcher) by email, February 2010

<sup>54</sup> Interview, Hvaler Fischer Union 9<sup>th</sup> of April 2010

fishermen told me that this affected only certain types of fishermen. For example eel fishermen might be affected because eel habitats are in shallow waters, while shrimp fishermen might not be affected because shrimp have their habitats around deeper waters. Consequently, eels are now a red listed species and as of 2010 are forbidden to fish in Norway. As for the belief of the disturbance of fish fry habitats in shallow waters, one should be careful to presume that this will only affect fish species in these areas. Research suggests that species within ecosystems are highly interdependent, thus the eradication of one species might have repercussions for biological diversity throughout large areas.

Furthermore, the underwater pipes that are being constructed as a result of more cabins are offered the opportunity to get water & sewer access are destroying the sea floor, thus resulting in the destruction of fish habitats. Also, dredging when constructing piers and harbors are believed to destroy fish habitats<sup>55</sup>.

From my interviews with the fishermen, I got the impression that all of them agreed that there has been a significant decline in fish numbers, but they disagree as for the reasons behind the decline. Some of the fishermen told me that declining fish numbers have nothing to do with human expansion and development at the coast. They believe that there are natural cycles that decide the amount of fish in the sea. I suspect that this has something to do with the level and type of knowledge about the environment the individual fisherman possesses. For example, I got the impression that the “old school”<sup>56</sup> fishermen believed in natural cycles of fish stocks, while the “new school” future-oriented fisherman viewed the declining fish numbers in relation to human expansion as well as natural cycles. What is more, the new school fishermen seemed to be the people that had some kind of formal position within Hvaler Fish Union. This can be explained with the fact that there is Norwegian-Swedish collaboration with regards to the National Park, which focuses on distributing knowledge and know-how to the fishermen that have been affected by the

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<sup>55</sup> *ibid*

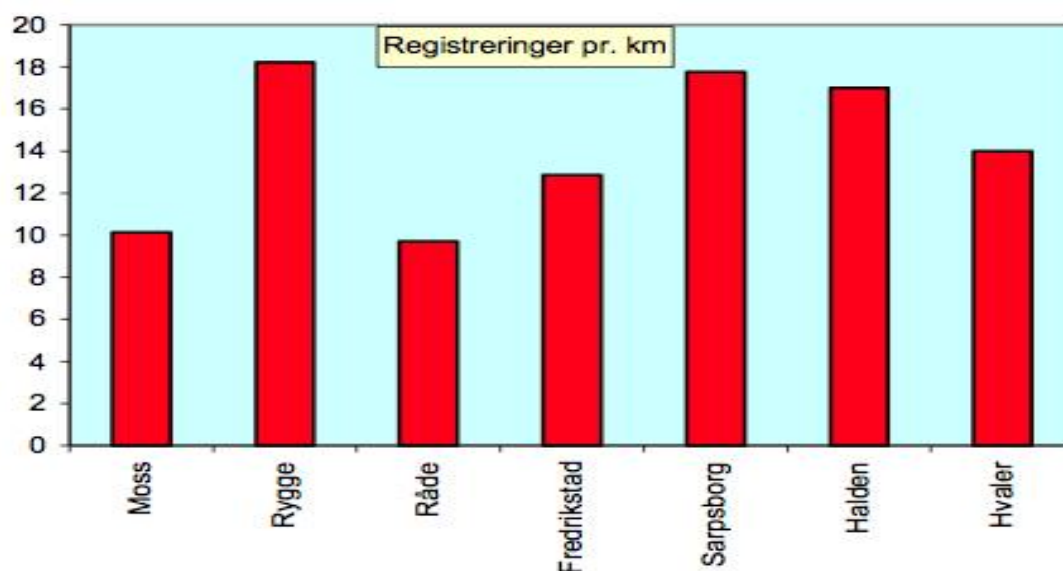
<sup>56</sup> The conservative fisherman, who believes in the old ways of doing things

park<sup>57</sup>. Gunnarsen told me that he felt these marine courses, which are offered the fishermen, have proved both interesting and helpful.

Even though disagreeing on the reasons behind the declining fish numbers, most of the fishermen agreed that the increased pressure and human activity has led to difficulties for some parts of the fishing industry with regard to their equipment. In many cases their nets or other equipment are being sabotaged. One of the fishermen told me that the increased focus on environmental protection has resulted in that fishermen are being perceived as killers, as a result of what he believed to be a general belief that the fish were more and more perceived as sentient beings. I got the impression that he was from the old school of fishermen.

Hvaler Fisher Union told me that in order to prevent further decline in fish numbers, water & sewage pipes should be constructed on land, preferably under ground and through mountain. In addition he believed that to create larger common piers instead of small private piers would relieve some of the pressure on fish habitats. However, he believed that to construct land pipes would not be preferable to cabin owners, because it will prove more expensive.

### 5.3 Public Access



**Chart 5.** Obstacles mapped per km<sup>2</sup> in the municipalities of Østfold (Østfold Fylkeskommune 2002:15).

<sup>57</sup> Interview, Hvaler Fischer Union 9<sup>th</sup> of April 2010



In the CG's report on obstacles within the 100-meter belt, 1401 obstacles were registered throughout the inspected areas at Hvaler, however only 20% of the coastline was covered. It is reasonable to believe that the process of mapping each obstruction throughout the coastline around Hvaler is very resource demanding. Furthermore the mapping and registration is only the first step in the process of managing obstructions within the coastline. After the mapping is done, it is up to HM to investigate each obstruction in order to decide whether it is legal or not. HM did not have the resources to investigate the findings from the rapport. In addition, HM stated that the responsibility regarding the Recreational Act is rather unclear, which has resulted in confusion surrounding where and with whom the responsibility really lays. HM believes the rapport should have been further investigated, but neither organizational nor economical incentives have been available<sup>58</sup>.

Finally, if an obstruction is considered illegal, HM has to start the process of having the obstruction removed, which in many cases might prove to be even more costly due to legal twists with private persons. Since this will most likely decrease the value and comfort of a property, it is reasonable to believe that cabin owners will not remove such obstructions voluntarily, hence they might hire lawyers against HM. Consequently, one of the biggest threats when it comes to outside pressure is private persons who can afford expensive lawyers<sup>59</sup>.

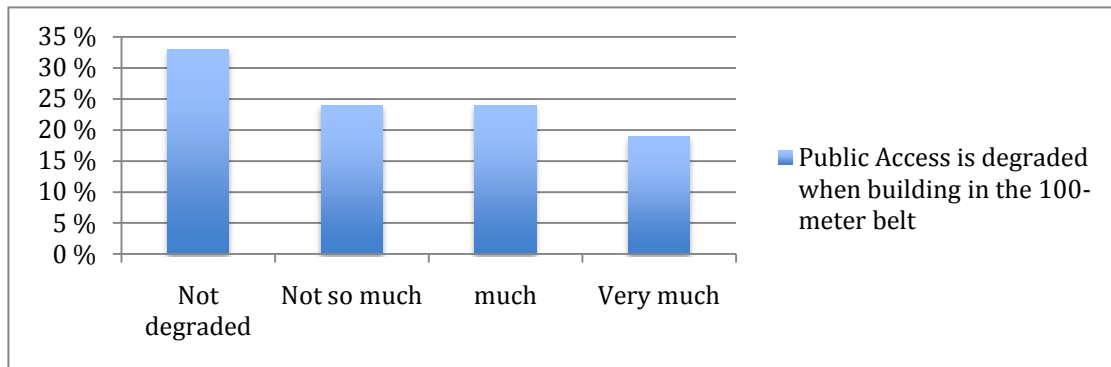
Hvaler Nature Conservation Association told me that they observe a lot of what he calls subtle road building. Many of the people that built cabins in the 60s and 70s are getting older and thus have no way of getting to or from their settlements. Airborne electric cables that are buried, damage the landscape, which often result in "natural" roads being constructed along these areas. Thus this opens up for private persons improving the already "constructed" roads. Ironically, this only changes one good for a bad, as the esthetical improvement of removing the electric cables, leads to privatization and esthetical degrading changes in the landscape<sup>60</sup>.

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<sup>58</sup> Interview, Hvaler Municipality 10.02.2009

<sup>59</sup> Interview, Hvaler Municipality 10.02.2009

<sup>60</sup> Interview with Hvaler Nature Conservation Association February 2009



**Chart 6.** Cabin owners' opinion on to what degree public access is degraded as a result of building within the 100-meter belt<sup>61</sup>

As for the 22 cabin owners I interviewed, 12 of the respondent's cabins were located within the 100-meter belt, and approximately 83% of these 12, claimed to have obstructions on their property which might be considered privatizing. 83% of them also thought that such obstructions could be considered to deteriorate public access. These obstructions were in the form of gardening plants, piers, terraces, flagpoles, lighting or stairs/walkways. As illustrated in chart 6, almost 60% of the cabin owners believed that public access were either not degraded or not so much degraded when building within the 100-meter belt.

## 6.0 Discussion

### 6.1 Coastal Legislation

There is much complex legislation one has to take into consideration when dealing with coastal management in Norway. Consequently, such legislations offer a long-term approach to management of issues, areas or activities irrespective of the political majority. Formulating, outlining and passing of legislations takes a considerable amount of resources and thus changing law is often avoided by the authorities. That is why legislations have great strength and great weaknesses. Such a weakness can be seen through coastal dispensation practice, which has led to unfortunate development. Even though the authorities probably recognized the faulty of the legislation regarding dispensations some time ago, the law was not revised until June 2009. Another disadvantage with legislations are that they sometimes open up for decision-making bias, thus the favor of one person or group compared with another. This will be discussed with relation to the Hvaler archipelago in the next sub-chapter.

<sup>61</sup> Interviews with cabin owners 18.02.2009

The strength of legislation can be seen through how governments are able to integrate sustainable development and ecosystem management principles, thus principles regarding precaution and intergenerational equity, into an official and sanctioned management framework (Kay & Alder 2005). As a result the strengths of legislation can easily turn to be its weaknesses, depending on a changing society. Thus legislation should be able to quickly adapt to a society which seems to be changing at a faster pace than before.

It seems that since Norwegian legislations concerning private ownership and outdoor recreation are fighting over the same resource, hence the difficulties involved with the success of decreasing the conflicts and exclusion costs related to coastal development and public access. However, when the authorities buy land for public recreational purposes from the private sector, there is a shift in resource regime, which ultimately results in less coastal conflict and in addition ensures public access according to Norwegian guidelines.

The distribution of resources tells us something about how individuals and groups can develop their lives. On one hand we have private property regimes which focuses on the idea that the owner of a resource receives the profits from uses that the market supports (Vatn 2005). As private property is important to support economic growth, it also creates inequalities. This is clearly noticeable through cabin owners, who not only obtain profit from the continuously increasing value of their property, but also acquire access to recreational traits. On the other hand we have common property regimes, which seems less dynamic than private property regimes because they are not tradable in the same way. Not having the private cabins at Hvaler would definitely have an effect on the economy in the municipality of Hvaler and will clearly limit economic growth. State property regime, e.g. land which is owned by the state for public usage, seem to protect public access, but will also limit economic growth when compared to private ownership. Nevertheless, state owned firms like schools, health care and care for the elderly seem to work well in Norway, though there exist arguments supporting privatization of such institutions. What is certain though, is that state ownership help to ensure equality and access for everyone, which is one of the fundamental issues concerning this thesis. It seems that the coast will continue to be a combined resource regime of private property, common property and to some degree

state property. There are high exclusion costs related to this system, which makes the institutions that regulates them essential for well management.

## **6.2 Dispensation Applications**

From my findings it becomes clear that there is a mutual understanding concerning dispensations applications between the CG and HM when it comes to coastal zone management. There is also a mutual agreement between the two parties that the political color of the politicians in power at Hvaler can influence the level of coastal management conflicts in the area. As of today, the politicians in majority in Hvaler Municipality are liberal and thus promote more development at the coast. As an example, the proposed new municipality plan of 2009-2021 opens up for increased building by dispensation. In the suggested new municipality plan, the dispensation guidelines are replaced with specific conditions, which if fulfilled, will grant exemption from the overall regulation plan requirement. To give guidelines on how to exempt from the legislation sends out signals and harmful expectations, which promotes building and development. The specific conditions, which are promoted in the suggested new municipality plan will go a long way in strengthening harmful expectations and signals because they allow exemptions from the legislation when meeting specific conditions. The guidelines and specific conditions should promote signals against and not for building within the 100-meter belt.

My findings suggest that it is fairly easy to be granted exemption from the legislation when it comes to water & sewer access. This can be related to the statements of the President of the Cabin Union. In many ways, granting such exemptions may be overall positive to the society. Consequently, it seems more environmental friendly to be connected to water & sewage pipes and it is better for public access when secondary structures like outdoor toilets are removed, which is often a requirement when making structural changes in order to gain water & sewer access. However, it becomes clear that such structural enhancements will result in hidden negative externalities, which have to be taken into account. The CG expresses the importance of hidden piece-by-piece building, which is hard to notice until it is too late. A handful of structural cabin enhancements might not seem to make a difference to the overall picture, but it is the sum of all the enhancements, which changes the characteristics of the coast. In addition such enhancements result in extended use of cabins, thereby increasing pressure on the environment and public access at an

extended period of time. For example, when the season for cabin usage is prolonged, it might result in the public having less access to the surrounding land for longer periods of time. Another outcome of extended cabin use may also prolong the boat season, which according to some of the fishermen might result in disturbance of the fish breeding cycle. Some of the fishermen also point out that the water & sewer pipes, which are constructed, are damaging to the fish breeding cycle. Hence there is a need for environmental impact assessments (EIA), which takes into account the elevated pressure, which is a result of extended use of cabins. An environmental impact assessment is an assessment of the positive and negative outcomes a project might have on the environment, taking natural, social and economical aspects into account. Hence it is important to take an interdisciplinary approach, which includes expert scientists from the above-mentioned schools in order to gain insight on possible outcomes. Interdisciplinarity focuses on the importance to view a problem through all the relevant schools of science in order to gain *analytical deliberation*. Hence when analyzing the outcomes of approved dispensation application one cannot focus on only economical and social aspects, but it is crucial to include the natural aspects as well. Only the interdisciplinary approach will gain access to all the possible negative and positive outcomes.

The ability a municipality has to give exemptions from the legislation through dispensation is important for the autonomy of the municipality and individual ownership rights. The ability to give dispensations from the legislation is there to make public goods available in consistence with local preferences, e.g. water & sewage access. Oates decentralization theorem suggests that the most efficient way of providing Pareto-efficient levels in a jurisdiction is by local governance and that central governing will only provide pareto-efficient levels across all jurisdictions (Oates 1972). However, when it comes to local governance and environmental protection, local pareto-efficient levels will often result in poor regional pareto-efficient levels. Hence, if building within the 100-meter belt can be perceived as a local Pareto improvement due to the gain of resources, it will not be a Pareto improvement regionally as non citizens of Hvaler municipality will not gain from the increased resources and will loose public access to recreational coastal land.

Research show that local governance and the ability to give dispensations at Hvaler and other coastal municipalities has led to development within the 100-meter belt that

goes against central government legislation and guidelines. Rational choice theory suggests that selfishness can in many ways guide actions of a person in order to achieve personal gain. Thus, according to rational choice theory, the politicians in Hvaler Municipality may take actions that promote development, which ultimately may result in environmental degradation. Such actions are noticeable through the suggested municipality plan of 2009-2021, where ways of making dispensations more obtainable is illustrated.

In my point of view, the grounds municipalities in Norway have based their decisions on regarding dispensations are far fetched, at best. Before the revised PBLn of June 2009, municipalities could allow exemptions from the legislation if there existed *special reasons* for doing so. Neither the CG nor HM had prepared a document, which defined what *special reasons* really were. From what I understand, each and every dispensation case would be analyzed in order to reach a conclusion whether the exemption would result in more positive than negative outcomes for the society. This looks good on paper, but what does this mean in practice? It is reasonable to believe that such a practice will result in an outcome, which is based on the discretion of the individual dispensation case handler, thus resulting in similar cases having different outcomes. This again will lead to applicants being left with a notion of unfair treatment and ultimately losing belief in the system itself. Consequently a system that few believe in will not be a very effective system. Accordingly, Chart 1, which represent the cabin owners' opinion on to what degree a private person and their organization (in this case Hvaler Cabin Union) can influence HM's policy making shows that cabin owners believe that they have little influence over HM's policy making as private persons. Many of the respondents added that is uncomplicated for people that have the resources to hire expensive lawyers to influence HM's policy making in order to reach exemption from the legislation. This would indicate that the legislation has indeed not functioned properly, and as I will discuss below, the revised PBLn will in my opinion not be a major improvement.

The revised PBLn of June 2009 has removed §7 about *special reasons* and replaced it with chapter 19. In my opinion the inaccurate term *special reasons* have been replaced by a rather unpredictable set of terms or guidelines in § 19-2. For example, one of the guidelines states that it should be taken into consideration whether the reasons behind the legislation are *significantly* disregarded when granting

dispensation. In addition, the revised legislation states that the benefits of giving a dispensation will have to be clearly greater than the disadvantages in an overall assessment. In my opinion this may also result in an outcome, which is based on the discretion of the individual dispensation case handler. The word *significantly* can easily be interpreted in different ways, thus opening up for detrimental coastal development and unfortunate decision-making. Furthermore, with regards to greater benefits than disadvantages, this is not very concrete and can also open up for unfortunate development and unfair treatment. Consequently, I still believe the legislation is rather inaccurate. *Special reasons* are replaced with an overall assessment of positive outcomes vs. negative. I believe this may lead to outcomes based on the individual executive case officer's personal opinion and not outcomes based on explicit rules and regulations. Another guideline in § 19-2 in the revised PBLn asserts that when reviewing a dispensation application, a negative statement from the CG should be considered properly. According to my interviews with the CG and HM, this was already a functioning guideline prior to the revised PBLn.

The revised plan does however include additions that, if well managed, might result in increased protection of public access and the environment. The opportunity to transfer dispensation management from the municipality to the county governor in § 19-4, is a step in the right direction when it comes to sustainable coastal development. However, from what I gather from interviewing the CG and with regards to local governance theory, the individual decision-making and the autonomy of the municipalities are very important in a Norwegian context and thus I believe that it will not be easy to implement this in practice.

The question is when should the central government take control? The Norwegian municipalities have no constitutional protection against central governing or a transfer of power which is now new to the PBLn. The municipality law of 1992 does not contain any formulations or descriptions on local governance (Hagen & Sørensen 2003). Hence, it should be possible and perhaps feasible for the central government to take more control over environmental management that clearly goes against national values. As a comparison, paternalism is when the authorities intervene with individual interests because they believe individuals are unable to make choices that are best for them. In Norway paternalism is fairly extensive and can be seen in relation to alcohol and nicotine legislations. With regards to this, it seems that the Norwegian authorities

regulates the autonomy of its citizens to a high degree. Comparing the individual right to consume alcohol to a municipality's ability to approve dispensation application might seem far-fetched, but it does make a point that in some cases, be it individuals or municipalities, what is being done to achieve a short-term good may be in conflict with our long-term interests. Consequently, perhaps the central government should consider interfering to a higher degree with local decision-making on environmental management that goes against national guidelines. If they had done so at an earlier stage, many coastal municipalities in Norway, including Hvaler may have appeared very differently than they do now. As explained in the theory chapter it is important to be adaptive when it comes to environmental governance, but it is also important to be responsive. Hence, the importance of revising legislations and institutions before it is too late.

All in all, I believe that many of the guidelines concerning dispensation management in chapter 19 were already on the agenda to HM prior to the revision. Consequently, chapter 19 will have a greater effect in municipalities that are even more affected by negative coastal development than Hvaler. Accordingly, it should be mentioned that there are municipalities in Norway that have experienced far more development with negative effects on public access and the environment than the municipality of Hvaler.

Another serious threat to long-term sustainable coastal management lies within the Norwegian democracy system. Every fourth year there is a municipality election, which most likely will result in many of the politicians in power at Hvaler being replaced. This means that when they have finally gained a deeper understanding of the complexities involved with robust sustainable coastal management, they are forced to leave. The people within the administration that care about coastal management will then have to start educating the new electives all over again (Nilssen 1999).

### **6.3 Municipality and Regulation Plans**

According to my findings, there has been building activity through regulation plans or the municipality plan's land-use section in the 100-meter belt to a pretty large degree at Hvaler the last 5 years. The reason for this is to promote commercial activity and population basis. This kind of building activity can be observed through the much-



discussed cases of “Havtunet” and “Skjærhalden Rorbuer”. These cases represent “backdoor privatization”, where units, which were initially intended for public use and to promote commercial business, have ended up being reserved for private individuals. Building within the 100-meter belt in order to promote commercial activity and population basis is considered to be easier than building for private purposes. Hence, private actors will, as discovered through “Havtunet” and “Skjærhalden Rorbuer” do just about anything in order to privatize units that were originally developed for the good of the public and to promote commercial activity at Hvaler. In my opinion the CG should be more skeptical to all regulation within the 100-meter belt. Furthermore it should be considered whether giving dispensations from plan instead of regulating an area for building would prove to be better practice. When an area such as “Havtunet” is regulated for building purposes it opens up for additional construction such as piers, boathouses and other obstacles that can be considered to hinder public access and degrade the environment. From what I understand, giving individual dispensations to such projects instead of regulating areas, will make it is easier for the authorities to keep track of development. Consequently this is an example were dispensation is preferable.

As the pressure on the coast and the 100-meter belt increase, “backdoor privatization” like “Havtunet” and “Skjærhalden Rorbuer” will most likely become more apparent in vulnerable municipalities in Norway. It seems important to gather information on such incidents, analyze them and focus on an inter-municipality communication system in order to prevent future similar incidents. What HM has learned from the cases of “Havtunet” and “Skjærhalden Rorbuer” should be shared with other municipalities so that these mistakes will not repeat themselves in a different region.

When it comes to development, the municipality plan lays the foundation to what is intended when it comes to development in a certain amount of years. As mentioned earlier, the municipality plan can either lay a foundation that promote or demote coastal building activity. The political majority decides which direction the municipality chooses to go; hence they utilize the municipality plan in order to secure local preferences. However, as mentioned earlier in the thesis, the HM’s actions when it comes to revising municipality plans are limited due to CG’s opportunities to object. Consequently this mechanism undermines the autonomy of the municipality, but is there to ensure that local preferences do not undermine national guidelines. In

order to protect public access and the environment at the coast and within the 100-meter belt it is important that the CG makes use of his ability to counteract the municipality. As mentioned earlier there are many examples of Norwegian municipalities where the CG seldom uses the opportunity to object, which may result in harmful coastal development, promoting local preferences on the expense of national preferences.

As noted the CG objects on several occasions to the suggested new municipality plan, because they believe the plan will undermine national values and guidelines which are considered to be overall more important than local preferences. Consequently, there exist a fine line between keeping local autonomy and addressing the welfare of the nation. Theory on environmental governance mentions possibilities of failure in both local and central governance. Hence, the ability to successfully combine the two types of governing without significantly undermining local autonomy seems crucial. From what I gather, this symbiosis is constantly changing as external pressure fluctuates. It seems that *learning from mistakes* is equally applicable in this setting as in any other and that constant revision of rules is needed as the society changes. In addition, with regards to the CG's objections to the new municipality plan, this says something about the level of communication and mutual understanding of coastal management. Previously, I mentioned in the "Findings" chapter that both the CG and HM completely agreed to the statement that there exists a mutual understanding on how cases within the 100-meter belt should be handled and that there is good communication between the two parties. Thus, these statements are not consistent with the level of objections to the new municipality plan. If there were much communication and mutual understanding between the CG and HM, one would think that the new suggested municipality plan might be more in consistence with the CG's opinions on sound coastal zone management. However, there can be several reasons for this not being the case. Firstly, while the HM administration might share views in coastal management with the CG, the HM politicians might not and especially not when the political majority is liberal. Secondly, positions within both the CG and HM are fluctuating just as in any other line of work, hence the level of agreement might change as people come and go. As for the level of communication between the CG and HM, I wonder why it goes as far as to where the CG has to object to a municipality plan. In my opinion it might prove more effective for HM to be

constantly communicating with the CG during the municipality creation process, so that the level of objections can be kept to a minimum. Then again, I can also see why a municipality might try to be less communicative about some of the points, which seek to promote coastal development. As mentioned earlier, the National Audit Office has found that many of the CGs seldom use their opportunity to object, which means that a municipality would be unwise not to try to promote building. In my opinion, the CG in Østfold is doing a good job promoting sustainable coastal management, which is apparent in the level of objections to the new municipality plan of 2009-2021.

#### **6.4 Biological Diversity**

The case of the Musk Orchid represent a typical case of what may happen to vulnerable species found in areas that are under extreme human pressure. Jan Ingar Båtvik (President of Østfold Botanic Union) blames HM for the destruction of the Musk Orchid, and from what I can gather from my findings, I would have to partly agree. It would seem mutual beneficial for both the Musk Orchid and HM to promote the red listed species at Hvaler as something unique which partly make the Hvaler archipelago what it is perceived by tourists, cabin owners and the general public. If the general population had been given this kind of information and a sense of responsibility for the ecosystem, which we are all part of, the Musk Orchid might have been better preserved. Hence, *providing information* is important when it comes to preserving endangered species, and is also one of five general requirements to a robust environmental governance system according to figure 16 in the theory chapter.

In addition figure 16 illustrates that in order to achieve this requirement, it is important to *devise rules that are congruent to ecological conditions* and *involve parties in informed discussions of rules*. The remaining localities for the Musk Orchid are now entailed inside the borders of the national park, which is in my opinion a good example of sound and sustainable environmental governance. The creation of the national park, though not without a fair amount of problems and disagreements between authorities and stakeholders, has led to the creation of rules that are believed to harmonize the ecological conditions in the area without overly affecting the human activities in the area negatively. Affected parties/stakeholders (fishermen, cabin owners, land owners, environmental organizations etc) have been involved in informed discussions with the authorities as well as with scientists so that agreements have been reached through an interdisciplinary approach. As a result, this will also

help induce compliance with rules among the affected parties and stakeholders. Hence, a system, which is perceived as fair and effective by the affected parties, will have good prognosis of being a successful system.

As I went out to the newly established national park centre at Skjærhalden, and talked to the manager Bernt Erik Larsen, I understood the importance of relaying information about the ecosystem, which we are all part of. The National Park Centre is filled with beautiful pictures and information on different species that inhabit the park. Larsen told me that they are going to mount a web cam next to the coral reef in the park that will send live feed directly from the reef site to a monitor, which will be displayed for visitors. The national park centre will also accommodate school classes in order to teach future generations about the species that reside in the national park. In my opinion this is very positive for the environment at Hvaler, because the more the public knows about fragile species, the ecosystem and interconnectivity, the better suited we are to preserve them. Larsen informed me that the CG, the County municipality, OF, HM and Innovation Norway shared the costs of a study on how and where a national park centre could be established. The report concluded that “Skjærhalden” was the best place to locate the centre, and in 2007 the Minister of Environment allocated 500.000 NOK and the county municipality provided 200.000 NOK in order to start the planning process. After that, Larsen contacted (“Direktoratet for Naturforvaltning”) which gave the centre a project grant in order to build the center and an annual operating grant of 600.000 NOK<sup>62</sup>. Consequently this shows how resources can be obtained in order to secure robust environmental management and how important environmental funding really is.

As mentioned previously in the “Findings” chapter, when the parking lot that destroyed one of the remaining few Musk Orchid localities were constructed, no data on biodiversity was digitally available. Again, this can be linked to one of the requirements for a robust environmental governance system, which is suggested in the theory chapter: *Provide necessary information*. Had this kind of information been conveniently available, the parking lot might not have been constructed in the first place. In my opinion it would seem that in addition to allocating more funds in order to map and manage biological diversity, it is also very important that there exist well-

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<sup>62</sup> Interview with Bernt Erik Larsen by email, Hvaler Municipality June 2010

structured dialogues and good communication between environmental organizations and HM. From what I understand from my findings, HM have not paid much attention to reports and recommendations from the environmental organizations, which is also quite puzzling because HM's chief advisor told me that pressure from environmental organizations is hardly noticeable. Perhaps the environmental organizations should make themselves more visible when it comes to expressing their views on cases concerning the environment, and perhaps HM should take their views more seriously.

The declining seabirds at Hvaler is another good example where environmental funding falls short. As previously mentioned, the expanding human activity around the Hvaler archipelago are most likely having an effect on some bird species, due to interference through recreational boating and hatching sites. In this case, environmental organizations and the CG have done great work in creating protection for the birds through by establishing bird reserves. However, there is only one person hired to oversee that these reserves, situated along 1248 km of coastline, are not violated by human activity. This can be related to *inducing compliance* with command and control measures, which I previously wrote about in the theory chapter. Violations of the bird reserves are punished with fines, but this seems only effective if the control measures of locating trespassers are well functioning; which they apparently are not in this case. Hence, theory suggests that if using a command and control approach in order to protect the sea birds populations in the Hvaler area, it is important to allocate sufficient resources. As of today, there are obviously not enough resources allocated to the protection of the sea birds, since one man cannot possibly enforce the rules related to bird reserves over such a large area. In addition to governance regarding *inducing compliance*, theory also suggests that providing infrastructure is a requirement when it comes to robust environmental governance.

Technological infrastructure might provide new and easier ways of relaying environmental information. As mentioned earlier, the national park center at Skjærhalden is currently in the process of installing a web cam within the coral fields in the national parks, which will display live feeds directly to the public. If this technology is successful in terms of educating the visitors of the national park center, it may also be used in order to observe human activity within the bird reserves. If such technology could be implemented within the bird reserves, fewer resources would be

needed for physically patrolling these areas. This can also be linked to the theory of adaptive governance, which expresses the importance of meeting increased pressure with adapting institutions that are in consistence of our increased knowledge on the present and future effects and outcomes of environmental threats. In a new press release from the Norwegian Government, they announce proposals for a new geodata Act that will ensure access to geographic environmental information nationally and across borders (Miljøverndepartementet 2010). The Act will implement a new point to the European Economic Area agreement (EEA) on infrastructure for geo-environmental information in Europe. Authorities in each of the member states are to create online services in order to make this kind of information accessible. The services are to be available to everyone and enable governments to share data locally and across borders (ibid). This kind of technological infrastructure will clearly help to ensure the provision of information, which is one of the requirements for robust environmental governance according to the suggested theory for this thesis. By making such geo-environmental information available electronically to everyone, loss of biodiversity such as the case of the Musk Orchid might be prevented or kept to a minimum.

As mentioned in the “Findings” chapter, the amounts of fish species, which are used for human consumption, have decreased over the years. As there might be several reasons for this, I will focus my discussion on how coastal development at Hvaler might be connected to loss of fish diversity in the area. According to my findings, Hvaler Municipality generally allows cabin expansion due to water & sewer access as long as certain conditions and requirements are met. In order connect cabins to the water & sewer systems, underwater pipes are constructed along the sea floor, which some of the fishermen believe to disturb fish habitats, ultimately resulting in decreased fish stocks. Typically, this scenario represents local governmental failure when it comes to combining environmental sustainability and coastal development that seeks to promote commercial activity and the population basis. This represents the main aspect of decentralization of power to local authorities, namely that public goods are made available in consistence with local preferences, where access to the water & sewer system can be perceived as a public good. A conflict of interest occurs between local governmental policies that seem to result in hidden negative environmental externalities and central government policies, which seeks to promote

environmental sustainability. As suggested in the theory chapter, when environmental decisions are being made, the different values across stakeholders and interest groups will often result in conflicts, but these conflicts can be avoided if the authorities, stakeholders, environmental organizations and academics from multiple disciplines are involved in dynamic dialogues. In this case, it seems important that cabin owners, the CG, HM, environmental organizations and scientists are involved in such dynamic dialogues in order to provide such public goods without destroying fish habitats. An alternative would be to construct the water & sewer pipes on land, but this choice of action will lead to another set of environmental and economical concerns. It would prove less cost effective to construct land-based pipes and disturbance of biological habitats would ultimately just be shifted from the sea floor to the land. If it would be possible to construct land-based pipes without affecting biological diversity, who will then compensate for the additional costs that comes with this alternative? In addition, the Nature Conservation Association expressed concerns with airborne electric cables being buried under the ground, which result in open wounds in the landscape, which cabin owners start to use as roads. As time goes by these wounds in the landscape will never heal, and eventually the roads will be permanent, thus privatizing recreational land and degrading public access. It is reasonable to believe that by constructing the water & sewer cables under ground instead of along the sea floor might result in this kind of hidden road construction. HM will then have to follow up and control such areas in order to prevent this, but just like all command and control measures in environmental governance, there are probably not enough resources available to do so.

Ultimately all degradation of biological diversity mentioned in this thesis is related to human activity. As cabins are developed from small cottages to state of the art country houses, biological diversity suffers as a result. If not through material construction like cables, pipes and larger building mass, then most certainly through increased human presence around the different species habitats. As human presence in Nature increases, it seems important that we are aware of how this presence is affecting ecosystems and what can be done to prevent degradation. Chart 4 in the findings chapter shows cabin owner's opinion on to what degree the environment is degraded as a result of building within the 100-meter belt. Accordingly, it reveals that just under 60% of the cabin owners believe that the environment is either not

degraded, or not so much degraded when building within the 100-meter belt. The question is if those individuals do not have enough knowledge about the environment to see that such coastal constructions result environmental degradation or if they do have the knowledge but convince themselves that it is not degrading because of their individual preferences as cabin owners (rational choice theory). To my experience the general public in many cases believe that environmental degradation is mass hysteria created through a media, which seeks out to create big headlines. Consequently this also can be related to age. Since the increased mass focus on environmental degradation is fairly new, it is reasonable to believe that younger generations support the notion that environmental degradation is a result of human activity, while older generations believe that such degradation is rather a result of natural cycles. The average age of the cabin owners that were interviewed is 63,6 years old, which may support the statement with regards to their opinion on building within the 100-meter belt and environmental degradation.

### **6.5 Public Access**

In addition to loss of biological diversity, less public access to recreational areas is a result of coastal development. It seems difficult for private persons to build new cabins around the Hvaler archipelago as of today, but it is rather enhancements to existing cabins in the form of fences, lawns, “private” signs, outdoor fireplaces, flagpoles, piers and extensions related to water & sewer access that mainly affect public access. As an example, a path I used to walk many years ago in order to reach a specific location that is suitable for diving, now feels awkward to use due to the privatized surroundings of one of the cabins that is situated along that path. Even if the owners of that cabin should allow me to use the path, it does not feel good to walk across what seems like someone’s personal garden. Examples like this can be found all over the Hvaler archipelago, in fact close to 1400 obstacles have been registered across 20% of the Hvaler coastline in the CG’s report on coastal obstacles in the county of Østfold (Østfold Fylkeskommune 2002). As of now, HM has done nothing to follow up the registered obstacles, claiming it is far to resource demanding to determine which obstacles are illegal and to remove them. This can be related to inducing rule compliance and command and control with regards to environmental governance. When illegal obstacles are registered, HM can according to the Outdoor Recreation Act of June 1957 § 40 demand the owners to remove them. If the owners



do not comply, they can be fined until they do so. However, since few resources have been allocated to the management of such obstacles, command and control governance is highly ineffective. It seems that HM only looks into such obstacles when neighbors or the public reports them, which hardly can be considered to be effective governance. Environmental governance theory suggests that in order to induce mass compliance, the rules must be perceived as effective and legitimate by all resource users. The rules concerning hindering coastal obstacles are most likely not considered as effective by the resource users (cabin owners), due to lack of control management and thus this is a typical example where the rules are broken because rule breakers know there is a good chance they never will be caught.

In the theory chapter of this thesis I wrote about the collective action problem and that individuals are assumed to be driven by self-interest and to be seeking individual benefit, thus resulting in the taking of as much as possible from collective resources like public access. Cabin owners that construct privatizing obstacles around their property is a good example of how individual resource holders maximize their own utility at the expense of others. It can also be related to the cabin owner's dilemma game from the theory chapter. This game basically illustrates that the best option for a cabin owner would be to defect from the rules, if everyone else were defecting.

Chart 6 in the findings chapter shows that approximately 32% of the interviewed cabin owners felt that public access is not degraded and around 25% felt that public access is not so much degraded when building within the 100-meter belt. This means that close to 60% of the cabin owners believe that building within the 100-meter belt does not affect public access much. Even though my sample size of the cabin owners is too small to generalize the total population of cabin owners at Hvaler, it still gives an indication of the opinion on the matter. Consequently if close to 60% of the 4700 cabin owners at Hvaler are under this opinion, it is reasonable to believe that many of them would construct privatizing obstacles around their property, not only because they might consider the obstacles harmless, but also because there does not exist a functioning system to prevent them from doing so. As a comparison, car drivers tend to follow speed limits because they know that there are frequent controls, and that breaking those limits might result in fines, the loss of their driver's license or even jail time.

If we take a look at figure 17 in the theory chapter, which represents the cabin owner's dilemma, the worst choice of the cabin owner would be to follow the rules while nobody else does. Since it is reasonable to believe that many cabin owners are aware of the ineffective rule system concerning illegal obstacles, they would be under the impression that nobody else follow the rules, hence the worst choice for a cabin owner would be to follow the rules in solitary and his best choice would be to defect. This would be the worst solution for the society and public access, since everyone will defect from the rules. However, if the rules were effective, the majority of the cabin owners will follow the rules, while only some will defect (free rides). This would be the second best solution for public access. The best solution for public access would be that everyone follows the rules. In my opinion rational choice theory like this over-simplifies reality, but it still might shed some light on how cabin owners will act under such conditions were ineffective environmental governance is apparent.

Whether one is a supporter of rational choice theory or not, it is reasonable to believe that a well managed set of rules and regulations, which are administered in such a way that individuals feel justly treated, will lead to what rational choice theory and the cabin owner's dilemma calls a 3,3 scenario were everyone follow the rules and everyone gains. However, the problem is creating a set of rules and legislations that leaves out the possibility of unfair treatment and creates equality for the law. In order to do that, more resources will have to be allocated in order to successfully register all illegal obstacles within the 100-meter belt at Hvaler and to apply sanctions for removal.

As we have discovered throughout this thesis there is a conflict between laws surrounding private property and legislation, which promote public access. What seems to have worked well for the purpose of ensuring public access to the 100-meter belt and the coastline, is the work of OF, which have in cooperation with the authorities bought private coastal land and turned it in to recreational land that is accessible to the public and protected from the private sector.

## **7.0 Conclusions, Summary and Final Remarks**

### **7.1 Summary of Findings**

It appears that there is a good communication system between the CG and HM when it comes to dispensation applications, which both parties are satisfied with. The most frequent pressure on the 100-meter belt is related to dispensation applications, and generally dispensation applications regarding water and sewer access.

Up until June 2009, a dispensation application was usually allowed when the HM approved a special reason for building. However, the municipality did not think the environment, nor public access is considered to be a special reason in itself; there should be a majority of positive reasons for the society. The revised PBLn of June 2009 turns the old paragraph concerning special reasons obsolete, replacing it with guidelines that should increase protection of the coastline. Furthermore the revised legislation makes it possible for the central government to take away HM's ability to give dispensations, should there be reason to believe that dispensation practice goes against national guidelines and values concerning coastal management.

Both the cabin owners and the president of the cabin union believe that their organization has a good deal of influence over Hvaler Municipality's policy making, while a private person has little influence. As a contrast, the Nature Protection Association believes they have little influence over the policy making. The fishermen do not believe their organization have much influence over policy making.

There has been much building within the 100-meter belt the last 5 years due to regulation plans. The typical reasons for regulating areas for building are to promote commercial business and population basis. The CG almost never objects to a regulation plan, because disagreements between the two parties are usually worked out in the planning process (at least up until now). The unintended privatization of the 100-meter belt through the cases of "Havtunet" and "Skjærhalden Rorbuer" are the result of grey areas in the legislation.

The new municipality plan, which is now being revised, demonstrates how a municipality can open up for building within the 100-meter belt and around the coastline. In addition, the letter of objections from the CG illustrates the functions of

the CG and how they are able to hinder development, which goes against national guidelines. This goes a long way in illustrating the importance of a well functioning CG that focuses on national guidelines with regards to biological diversity and public access.

President of Østfold Botanic Union stated that management when it comes to biodiversity in the municipality is inadequate. He believes that up until now, HM has done next to nothing in order to save the remaining Musk Orchid habitats. Furthermore he stated that the people working for the CG have been eager to protect the Musk Orchid from private property owners and HM.

Fishermen agree that fish stocks are declining, however they disagree when it comes to the reasons behind this decline. Some of the fishers believe that the declining fish stocks is a result of increased human activity along the coast, while others believe that natural cycles result in less fish in the sea. Those who believe that the decrease in fish stocks are related to human activity tend to belong to the “new school” of fishermen and claim that increased boat activity disturbs breeding grounds and fish fry, and that cables related to water & sewer access degrades the sea floor, which also affect fish stocks.

Mapping obstacles and obstructions within the 100-meter belt at Hvaler is a very extensive job. However, after the mapping process is done, the perhaps largest piece of work remains: Deciding which obstructions are illegal and the removal process. So far nothing has been done to analyze the obstruction findings at Hvaler in terms of deciding legitimacy of the recorded obstacles. HM claims there is a question of where the responsibility lies and lack of resources. Close to 60% of the cabin owners that were interviewed believed that building within the 100-meter belt would not deteriorate public access much.

## **7.2 The Critical Importance of Environmental Governance**

As we have seen through theory on environmental governance in relation to biological diversity and public access, a well-function environmental management system rely on multiple dynamic institutions and legislations that are able to adapt to the constant increasing pressure we are witnessing in the coastal zone around the Hvaler Archipelago. Furthermore it seems crucial to relay and share environmental information and data, both on the local level as well as the central. It is apparent that

the local and central government are polarized due to the municipality's right of autonomy and its work for protecting local preferences which seems to go against national guidelines and values, depending on local political majority.

It seems that the CG is doing a good job in maintaining local autonomy while still ensuring national values like public access and protection of biodiversity. However, due to the extreme pressure, which only continues to increase, unfortunate incidents like the destruction of the Musk Orchid and "sneaky" privatization like "Havtunet" and "Skjærhalden Rorbuer" have occurred. This only emphasizes the importance of adaptive environmental governance, which continuously seeks out to adjust institutions and legislations in order to meet a changing society and changing values. Nilssen (1996), states that what is most terrifying is the attitude, which the new generation of coastal residents have towards land and sea use. *"A vulgar yuppie-mentality where the expressions "me and mine", "I do what I please", "I have paid for it" have quickly spread to a geographical area that until very recently was characterized by open access for all and a balanced sense of ownership when it comes to land use and traffic between buildings"* (ibid: 2). It becomes clear that such values towards the coastal landscape will demand increased efforts from both the local and central authorities.

### **7.3 What is next?**

The conflicts related to the 100-meter belt and the coast at Hvaler are terribly complex and a highly "touchy" discussion area where almost everyone has an opinion, but few have the courage to express their views officially, afraid of the consequences. It seems that the majority of the public are talking about self-utilization among the bureaucrats and a system, which favors an elite. However, such accusations have no real proof and to go public with something like this would raise a lot of anger. This thesis does not accuse HM of such behavior, but rather recognizes that theory suggest such explanations as a possible reason for miss-management. Recently a Norwegian movie producer released a documentary, which claimed that a private investor had paid all expenses related to the birthday party to one of the lead bureaucrats that worked on the private investor's future building project located inside of the 100-meter belt in Fredrikstad municipality (neighbor municipality of Hvaler). The media coverage of this incident was immense and when the movie producer was asked to present evidence, he decided to revise the film (Kvalvik 2010).

Consequently it seems that many people believe the coastal management system is unfair, and a system that is believed to be flawed by the public, can be considered to be a less effective system. Thus it is important to ensure equality for the law in order to generate a public belief, which supports the system and hence follows it. With regards to dispensation applications, the revised PBLn replaces special reasons with a set of guidelines, which in my opinion also leaves the outcome to the mercy of the individual case handler and not the legislation, thus further promotes inequality. The revised PBLn has just recently been implemented and it is yet to be seen whether future dispensation practice will take one step towards national values and one step away from local preferences.

The coast at Hvaler requires long-term management. It seems crucial for the authorities to be several steps ahead of the pressure groups that support increased building activity. Consequently this conflict can be identified as intergenerational, because the decisions made by one generation will have consequences for the following generations. Accordingly, this takes us back to the meaning of the word environmental sustainability itself, hence to avoid depletion of resources in order to secure an equal foundation for future generations. Achieving sustainable development in coastal areas will be very difficult, but without good planning it will be next to impossible.

According to my research, the lack of funding seems to hinder the municipality when it comes to good management of public access and biological diversity. Public access and biological diversity is considered of great national importance, and thus the central government should allocate funding accordingly. The question is however, if the municipality knowingly neglects to allocate resources to the environment, with hopes of increased financial support from the central government, which is according to Hagen & Sørensen (2003) a feasible action for Norwegian municipalities.

In the 90s Hvaler municipality received project oriented funding from the central government to use for environmental purposes. Such project oriented funding may only be used for the purposes it was intended by the central authorities. As a result there was higher focus on environmental management and an environmental manager was hired in HM. However, when the additional funding lost its project orientation, the money was spent on other things and the environmental manager position was

removed. In other words, the municipality receives money from the central government, which is supposed to be utilized for environmental purposes, but are in reality used for what is considered to be more pressing issues like education and health. Accordingly, one solution to improve HM's environmental management is for the state to reinitialize the environmental project orientation to the funding, in order to secure that the money is being utilized for environmental purposes.

Finally, I would like to offer six virtues of coastal planning, which represent the main issues and theories in this thesis: (adapted from Kay & Alder 2005)

To Seek:

- The money and willingness to implement plans;
- True economic values of coastal resources and implementing management which reflect those values;
- An appropriate balance between central and local management;
- Optimal solutions to resource sharing on the coast, especially commercial activity and uses, such as recreational activity;
- Workable strategies for ensuring equitable access to coastal resources for all sections of society;
- Approaches that are able to adapt quickly to changing pressures, community and political expectations, and the increasing pace of change in the economy;

To understand:

- The values and expectations of all stakeholders in coastal management.
- The role of traditional and local user knowledge. The ecosystems (including human ecosystems) on which management decisions are based; and
- Deal with uncertainties in decision making;
- The capacities required for coastal management, including training, monitoring and scientific studies;

To develop:

- And maintain appropriate stewardship of coastal resources tailored to social and cultural settings of the nation;

To link:

- Coastal initiatives at all scales – from international to national to regional to local;
- Managers to other managers to further develop theoretical and practical management and planning approaches;

To bring into mainstream:

- Monitoring and evaluation at all stages of coastal management;
- Sustainable economic and social development

To sustain:

- Community expectations after plans are completed;
- The energy of local coastal managers;

This thesis has presented difficulties concerning local (and regional) coastal management with regards to development and its effect on what the author has considered as two of the most important coastal resources; public access to recreational land and biodiversity. Hopefully, the thesis will prove to be helpful to coastal managers even though the author does not presume to have offered all the solutions. However, if taking the six virtues of coastal planning into consideration, which basically sum up the main areas of this thesis, one should gain some insight into which direction future coastal management and environmental governance should be heading.



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**List of people involved in the qualitative interviews:**

**Nature Conservation Association (“Naturvernforbundet”):**

Pål Bugge, President Østfold

Arild Ådnem, President Hvaler

**Østfold Botanic Union:**

Jan Ingar Båtvik, President

**Hvaler Municipality:**

Anna Auganes

**The County Governor of Østfold:**

Geir Gartmann, Senior Advisor

Ole Martinsen, Dispensation handler

**Hvaler Fisher Union**

Jan Gunnarsen, President

**Hvaler Cabin Union**

Gunnar Dahl-Johansen, President

**Unstructured Interviews carried out by email:**

Geir Harden: Advisor at the County Governor’s Office

Per-Arne Johansen: bird watcher around the Hvaler archipelago

Torleif Gjellebekk: Chief Advisor (“Rådmann”), Hvaler Municipality administration

Bernt Erik Larsen: Business Manager (“Nærings sjef”), Hvaler Municipality administration

**List of people involved in the quantitative interviews:**

Hvaler Cabin Union members

Hvaler Fisher Union members

## Appendices

### **Appendix 1: Questionnaire for Hvaler Municipality:**

Thank respondent for receiving me and inform him/her that answers will be kept anonymous and that respondent have the opportunity to decline answering questions should he/she wish so.

I will also explain to the respondent that I will be asking detailed question of the legislation of 1965 and issues concerning the 100-meter belt as an effect of this. I will also need to ask the respondent for some statistical reports.

#### **Info on respondent**

1. Name of respondent?
2. Position within Hvaler Municipality?
3. How long have you been in this position?
4. Briefly describe what your job tasks are?
5. What kind of education and background do you have?

#### **Coastal zone management within Hvaler Municipality**

6. What has been the general tendency when it comes to building activity within the 100-meter belt in Hvaler Municipality since amending the legislation for planning and constructions of 1965?
7. Has the practices of the county governor and Hvaler municipality concerning the legislation of 1965 and the regulations of 1985 led to decreased or increased building activity?

Why?

8. How many dispensation cases have been authorized for implementation?
9. Which cases have been overruled? By whom and why? (I mean which applications were not given dispensation to. Did Hvaler Municipality reject dispensation, or the county Governor?)
10. Have the priorities, which may determine the decision-making, changed since the regulation of 1965? (More focused on biological diversity now, than before?)

*(Ask respondent for statistics on cases from 2002-2007. How many applications, how many were approved and how many were denied)*

11. In your opinion has the decentralization of decision-making to Hvaler Municipality resulted in improved or less improved public access to recreational activities within the 100-meter belt surrounding Kirkeøy?
12. Are there any pressure groups or lobbying groups that may influence the decision-making processes of Hvaler Municipality? If so, who are they?
13. What are the pressure groups major areas of interest and concern?
14. How do the pressure groups try to influence decisions made by Hvaler Municipality?
15. In your opinion, how can the complaint system be made more effective?
16. What role does Hvaler Municipality play when it comes to preserve endangered species within the 100-meter belt?
17. Which species are endangered?
18. How do you see future events in coastal zone management now that the new plan and construction law is to be implemented in 2009?
- a) Will this new legislation make it easier for Hvaler municipality to preserve endangered species and protect public access within the 100-meter belt?
- b) Any other thoughts on this?
19. Please tell me briefly about Outer Hvaler National park and what consequence it will have for public access within the 100-meter belt
20. To what degree does Hvaler Municipality experience pressure when it comes to building activity within the 100-meter belt?
- High
- Normal
- Low



21. Does Hvaler municipality receive adequate free legal support from the state in problematic cases within the 100-meter belt?

Yes

No

If no, please answer why this is so.

*(all municipalities are entitled free legal support in such cases)*

22. What kind of investigation mechanisms does Hvaler Municipality have in order to observe new buildings, which are not consistent with the law of Plan and Construction?

Can you tell me about the scale of these mechanisms and how successful they are? Why are they successful/not successful?

23. According to §86a, smaller buildings can be built without any form of application. Do you think that this leads to more illegal buildings being built?

24. Does Hvaler Municipality experience a problem when it comes to smaller buildings like boathouses being used as cabins?

Yes

No

If yes, have you investigated this? If yes, do you have statistics on this? If no, what is the reason for not looking into this?

**Dispensation from the no-building policy as a result of “special” reasons**

25. § 7 opens up for exemptions from the no-building policy within the 100-meter belt if there are “special” reasons for the project. Have the Municipality created a document defining “special” reasons?

Yes

No

If yes, may I please have this document?

If no, do the Municipality have other ways to define and determine “special” reasons? If yes can you please tell me about it?

26. Are all dispensations handed over to the county Governor for approval?

Yes

No

If no, please explain why

If yes skip to

27. Has Hvaler Municipality failed to send dispensation applications to the county Governor's office for statements the last 5 years?

Yes

No

If yes, how many?

28. To what degree does the Municipality send dispensation applications concerning new buildings within the 100-meter belt to the county governor for his comment/opinion?

Always

Almost Always

Sometimes

Almost Never

29. What are the criteria for a dispensation case being sent to the county Governor?

30. If the county Governor discourages a dispensation to a building within the 100-meter belt, to what degree do the Municipality follow the county Governor's recommendation?

Always

Almost Always

Sometimes

Almost Never

The county Governor has never discouraged such a dispensation

### **Exemptions within dense populated areas**

31. The law of Plan and Construction §17-2 is not valid when it comes to dense populated areas. Are there any areas on Kirkeøy, which the Municipality regards as such areas, and are not parts of a regulation plan?

Yes

No

Which areas?

32. Have the Municipality created a document defining “dense populated areas”?

Yes

No

If yes may I please have the document?

If no, do the Municipality have an official definition of “dense populated areas”?

Yes

No

If yes please describe this definition

33. Have the municipality ever been in doubt if the area is to be defined as “dense populated” or not, when it comes to dis/approving cases?

Yes

No

If yes have the Municipality ever contacted the county Governor in order to shed light on this?

Never

Sometimes

Many times

34. Please tell me about the Municipality’s practice with regards to approving new buildings in dense populated areas within the 100-meter belt the last 5 years?

*(not areas that included in a regulation plan)*

35. Does the exemption from the law of Plan and Regulation create difficulties for the Municipality when it comes to builders claiming their right to build?

Yes

No

**Areas that have been regulated for building purposes**

36. To what degree has there been building activity in areas that have been regulated for building purposes within the 100-meter belt in the last 5 years?

- A large degree
- Fairly large degree
- Small degree
- Seldom/never

If there has been building activity within the 100-meter belt regulated for building purposes the last five years, can the Municipality give reasons for allowing this?

37. The law of Plan and Construction (in §§7 and 17-2) exempts three categories from the no-building policy: Dispensation for “special” reasons, when an area is regulated for building purposes or if an area is defined as dense populated. Have the Municipality in any way changed their practices surrounding these categories the last 5 years?

- Yes
- No

If yes please tell me which category this is and describe in which direction practices have been changed to (more restrictive/more liberal)

38. When the county Governor has objections regarding a regulation plan within the 100-meter belt, to what degree does the Municipality accept these objections?

- Always
- Almost Always
- Sometimes
- Almost Never
- The county Governor has never discouraged such a dispensation

39. How frequently has the county Governor objected to a regulation plan within the 100-meter belt the last 5 years?

- Every time the Municipality have wished to build within the 100-meter belt
- Almost Always
- Sometimes
- Never
- The Municipality have never included plans of building activity with the 100-meter belt the last 5 years

**Signals from the Environmental Department**

40. Is Hvaler Municipality satisfied with guidelines on coastal zone management from the Environmental Department the last 5 years?

- Yes
- No

Comments on this?:

**Relationship with the county Governor**

Please determine to what degree the municipality agrees with the following claims

30. There is much communication between the Municipality and the county Governor when it comes to coastal zone management within the 100-meter belt

- |                          |                          |                          |                          |                          |
|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| Completely               | Partly                   | Neither Agree            | Partly                   | Completely               |
| Agree                    | Agree                    | nor disagree             | Disagree                 | Disagree                 |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

31. There is adequate communication between the Municipality and the county Governor when it comes to coastal zone management within the 100-meter belt

- |            |        |               |          |            |
|------------|--------|---------------|----------|------------|
| Completely | Partly | Neither Agree | Partly   | Completely |
| Agree      | Agree  | nor disagree  | Disagree | Disagree   |

32. There is mutual understanding between the Municipality and the county Governor on how to handle cases within the 100-meter belt

Completely	Partly	Neither Agree	Partly	Completely
Agree	Agree	nor disagree	Disagree	Disagree
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Appendix 2: Questionnaire for The County Governor:**

Thank respondent for receiving me and inform him/her that answers will be kept anonymous and that respondent have the opportunity to decline answering questions should he/she wish so.

Explain respondent that I am doing masters degree in International Environmental Studies and explain briefly what my thesis is about.

Explain that the interview seeks out to determine the relationship between the county Governor and Hvaler Municipality when it comes to building activity within the 100-meter belt.

**Info on respondent**

- 41. Name of respondent?
- 42. Position within the County Governor’s Office
- 43. How long have you been in this position?
- 44. Briefly describe what your job tasks are?
- 45. What kind of education and background do you have?

**Coastal zone management within Hvaler Municipality**

- 46. What has been the general tendency when it comes to building activity within the 100-meter belt in Hvaler Municipality since amending the legislation for planning and constructions of 1965?
- 47. Has the practices of the county governor and Hvaler municipality concerning the legislation of 1965 and the regulations of 1985 led to decreased or increased building activity?

Why?

48. How many cases have been authorized for implementation?
49. Which cases have been overruled? By whom and why?
50. Have the priorities, which may determine the decision-making, changed since the regulation of 1965? (More focused on biological diversity now, than before?)

*(Ask respondent for statistics on cases from 2002-2007. How many applications, how many were approved and how many were denied)*

51. In your opinion, has the decentralization of decision-making to Hvaler Municipality resulted in improved or less improved public access to recreational activities within the 100-meter belt surrounding Kirkeøy?
52. Overall Statistics from the national audit office in 2001/2002 show that County Governors in pressured coastal municipalities in Norway have been reserved when it comes to issuing complaints. Why is this so? Have the County Governor in Østfold followed this trend? If so why?
53. What are the major factors that determine the County Governor's decision-making after making complaints?
54. Are there any pressure groups or lobbying groups that may influence the decision-making processes of Hvaler Municipality? If so, who are they?
55. What are the pressure groups major areas of interest and concern?
56. How do the pressure groups try to influence decisions made by Hvaler Municipality?
57. In your opinion, how can the complaint system be made more effective?

The county governor can overrule the Municipality's decision. When this happens, the Municipality can revise their case and then send it back to the county Governor. If the county governor STILL disapproves, the case will be sent to the environmental department for a final decision.

58. How do you see future events in coastal zone management now that the new plan and construction law is to be implemented in 2009?

- c) Will this new legislation make it easier for Hvaler municipality to preserve endangered species and protect public access within the 100-meter belt?
- d) Any other thoughts on this?

59. Please tell me briefly about Outer Hvaler National park and what consequence it will have for public access within the 100-meter belt

**Management of Municipality Plans, which affects the 100-meter belt**

60. Has the county Governor given general guidance to Hvaler Municipality on how to best form the Municipality Plan in order to ensure control over building activity within the 100-meter belt?

Yes

No

If yes, please give me a copy of this/these document/s.

61. Please state how many Municipality Plans there are in Hvaler Municipality which give permission for building activity within the 100-meter belt

62. Have the county Governor had objections to parts of or whole of a Municipality Plan because it opens up to more building activity within the 100-meter belt?

Yes  How many?

No

63. When the county Governor has had objections to a Municipality Plan because it opens up for increased building activity within the 100-meter belt, to what degree does Hvaler Municipality comply?

Always

Almost always

Approx half of the time

Sometimes



Never

64. When Hvaler Municipality has not complied with the county Governors objections to the Municipality Plans, what is usually the reason for this? What is usually the outcome of such a dispute? In whose favor? Can you provide me with any examples where Hvaler Municipality has not complied with your objections?

65. Has it occurred in the last five years that Hvaler Municipality have not accepted the county Governor's objection and failed to direct the case for further necessary follow-up within the county Governor's office or the environmental department?

Yes

No

If yes, please explain:

66. Please describe the experience the County Governor has had the last 5 years when objecting to increased building activity within the 100-meter belt in Hvaler Municipality

67. The Environmental Department has the opportunity (PBL §20-5) to take action against Municipality Plans that do not preserve national interests within the 100-meter belt. Does the county Governor know if such actions have been taken against Hvaler Municipality?

Yes

No

If yes, please elaborate

#### **Addressing regulation plans within the 100-meter belt**

68. Have there been approved any regulation plans in Hvaler Municipality the last 5 years that will result in building activity in untouched areas within the 100-meter belt?

Comments?:

69. How many regulation plans in Hvaler Municipality, which involves the 100-meter belt has the county Governor addressed the last five years? Please state the number for each year separately

70. In your opinion has public access within the 100-meter belt decreased the last 5 years because of regulation plans?

Yes

No

If yes, please elaborate

71. How many times during the last 5 years has the county Governor objected to regulation plans within the 100-meter belt, issued by Hvaler Municipality?

72. How many times during the last 5 years has the county Governor approved regulation plans within the 100-meter belt, issued by Hvaler Municipality?

73. A milder action than objection in these cases is to discourage. Please describe the county Governors experience when discouraging regulation plans because they open up for increased building activity within the 100-meter belt, the last 5 years

74. When the county Governor has objections regarding a regulation plan within the 100-meter belt, to what degree does the Municipality accept these objections?

Always

Almost Always

Sometimes

Almost Never

The county Governor has never discouraged such a dispensation

75. How frequently has the county Governor objected to a regulation plan within the 100-meter belt the last 5 years?

Every time the Municipality have wished to build within the 100-meter belt

Almost Always

Sometimes

Never

The Municipality has never included plans of building activity with the 100-meter belt the last 5 years

**Dispensation from the no-building policy as a result of “special” reasons**

76. In your opinion has public access within the 100-meter belt decreased the last 5 years because of dispensations?

Yes

No

If yes, please elaborate

77. In your opinion, has Hvaler Municipality been stricter when it comes to giving dispensations within the 100-meter belt, the last 5 years?

78. Are all dispensations handed over to the county Governor for approval?

Yes

No

If no, please explain why

79. Does the county Governor know if Hvaler Municipality have failed to send dispensation applications to the county Governor’s office the last 5 years?

Yes

No

If yes, how many

80. To what degree does Hvaler Municipality send dispensation applications concerning new buildings within the 100-meter belt to the county governor for his comments/permission?

Always

Almost Always

Sometimes

Almost Never

81. If the county Governor discourages a dispensation to a building within the 100-meter belt, to what degree do the Municipality follow the county Governor’s recommendation?

Always

- Almost Always
- Sometimes
- Almost Never
- The county Governor has never discouraged such a dispensation

82. To what degree is the Municipality legally complied to follow the county Governor's discouragement?

Please explain

83. How many dispensation cases have the county Governor addressed the last 5 years? How many have been approved?

Addressed: \_\_\_\_\_

Approved: \_\_\_\_\_

84. When the county Governor disapproves a dispensation application, to what degree does Hvaler Municipality comply?

- Always
- Almost Always
- Sometimes
- Seldom/Never

85. § 7 opens up for exemptions from the no-building policy within the 100-meter belt if there are "special" reasons for the project. Have the county Governor created a document defining "special" reasons?

Yes

No

If yes, may I please have this document?

If no, does the county Governor have other ways to define and determine "special" reasons? If yes, can you please tell me about it?

86. What are the criteria for a dispensation case being sent to the county Governor?

87. Can you give me typical "special" reasons when approving new buildings within the 100-meter belt?

88. Does the county Governor have routines, which ensures that Hvaler Municipality is following the County Governors recommendations?

Yes

No

If yes, please briefly describe them, or give me documents

89. After having their dispensation application rejected by Hvaler Municipality, a cabin builder can complain to the county Governor. How big a percentage of these complaints does the county Governor support Hvaler Municipality's rejection?

All

Almost All

Approx Half

Some

None

**County Governor's own opinions about coastal zone management**

90. Do you believe the county Governor's possible actions when dealing with Municipality Plans are sufficient and effective means for protecting the 100-meter belt?

Yes

No

If no, please elaborate

91. Do you believe the county Governor's possible actions when dealing with Hvaler Municipality's regulation plans are sufficient and effective means for protecting the 100-meter belt?

Yes

No

If no, please elaborate

92. Do you believe the county Governor's possible actions when dealing with dispensations are sufficient and effective means for protecting the 100-meter belt?

Yes

No

If no, please elaborate

**Relation and cooperation between the county Governor and the Department of Environment.**

93. Does the county Governor feel that adequate information and guidance has been received from the Environmental Department the past 5 years?

Yes

No

If no, please elaborate

94. Do you feel that communication between the Environmental Department and the county Governor can be improved in any way?

Yes

No

If yes, how can this be improved?

95. To what degree does the country Governor feel that uncertainties and unclear defined laws leads to increased building activity within the 100-meter belt?

High

Medium

Low

Comments?:

### Relationship with the Hvaler Municipality

Please determine to what degree the county Governor agrees with the following claims

96. There is much communication between the Municipality and the county Governor when it comes to coastal zone management within the 100-meter belt

Completely	Partly	Neither Agree	Partly	Completely
Agree	Agree	nor disagree	Disagree	Disagree
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

97. There is adequate/sufficient communication between Hvaler Municipality and the county Governor when it comes to coastal zone management within the 100-meter belt

Absolutely	Partly	Neither Agreed	Partly	Absolutely
Agreed	Agreed	nor disagreed	Disagreed	Disagreed
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

98. There is mutual understanding between Hvaler Municipality and the county Governor on how to handle cases within the 100-meter belt

Absolutely	Partly	Neither Agreed	Partly	Absolutely
Agreed	Agreed	nor disagreed	Disagreed	Disagreed
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### Appendix 3: Questionnaire for pressure groups:

Thank respondent for receiving me and inform him/her that answers will be kept anonymous and that respondent have the opportunity to decline answering questions should he/she wish so.

1. Name of respondent

2. Gender

- Male
- Female

3. Age

4. What is your relationship with Hvaler?

- Summerhouse owner
- All-year house owner
- Tourist
- (Organization?)
- Other

5. How long have you had relations to Hvaler? (Please state in years)

6. Have you ever had a dispute with Hvaler Municipality

- Yes
- No

If no go to question 8

7. In what category did this dispute belong?

- Building dispensation Application
- Constructions within the 100-meter belt (e.g. private fence, road, Flagpoles)
- Public access to beaches, shore line, etc
- Fishing or Farming
- Conservation issues (please describe) \_\_\_\_\_
- Other            what kind of dispute:



8. Did this dispute turn out in your favor?

Yes

No

9. To what degree do you think private persons and organizations have the ability to influence Hvaler Municipality's decision-making when dealing with the 100-meter belt according to "Plan og bygningsloven" of 1965

Private persons:

Very Much

Much

Not so Much

Not at all

Your organization (if any)

Very Much

Much

Not so Much

Not at all

10. In your opinion, is Hvaler Municipality's policies on building activity within the 100-meter belt too strict or too easy-going

Too Strict

Too easy-going

No opinion

Comments on this?

11. To what degree do you think public access to the 100-meter belt suffers as a result of increased building activity within the 100-meter belt

Very Much

Much

Not so Much

It doesn't suffer

No opinion

12. To what degree do you think the environment suffers as a result of increased building activity within the 100-meter belt?

- Very Much
- Much
- Not so Much
- It doesn't suffer
- No opinion

**Please determine to what degree you agree with the following claims:**

13. The laws which concerns the 100-meter belt are too strict, resulting in unfair decisions by the Hvaler municipality and/or the County Governor

Strongly	Partly	Neither Agreed	Partly	Absolutely
Agree	Agree	nor disagree	Disagree	Disagree
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

14. Is the new law of Plan and Construction of 2009 known to you?

- Yes
- No

If no, skip to question 17

15. In you opinion will this new law result in improved public access within the 100-meter belt?

- Yes
- No
- No opinion

If no, why will it not have an improved effect?

16. In you opinion will this new law result in improved environmental protection within the 100-meter belt?

- Yes

- No
- No opinion

17. In your opinion will this new law result in improved conditions for private cabin owners within the 100-meter belt?

- Yes
- No
- No opinion

18. Are you familiar with Outer Hvaler National Park?

- Yes
- No

**Please state level of agreement**

19. Outer Hvaler National Park will have a positive effect on the environment, preserve cultural landscape and increase public access to the 100-meter belt

Strongly	Partly	Neither Agreed	Partly	Absolutely
Agree	Agree	nor disagree	Disagree	Disagree
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Appendix 4: Municipality Plan guidelines §3:**

- a. On each plot there can only be developed one building with one user devise (bruksenhet). Standalone sheds are not allowed. Existing legal listed sheds can be extended to 15m<sup>2</sup>. This applies only to one shed per property and not to any kind of separate buildings for permanent stay.
- b. Fences or any type of access restriction constructions are not allowed.
- c. It is prohibited to expand or develop existing roads, parking plots or paths.

- d. The construction shall not be of more than one floor in size, with an average soffit (“gesims”) height of 4 m and a maximum roof height of 5.5 m.
- e. The construction, within one property, shall not be expanded into 2 separate user units.
- f. For non-roofed terraces that are connected to a cabin, expansion is allowed, however the amount of square meters is not to exceed 20m<sup>2</sup>. Roofed terraces that are connected to a cabin can be expanded to 10m<sup>2</sup>. The total amount of roofed and non-roofed terrace connected to a cabin is not to exceed 30m<sup>2</sup>.
- g. The construction of non-connected terraces are not allowed
- h. Swimming pools etc, are allowed as long as they are situated within the frames of point f.
- i. Settlements are to be adjusted to the natural surroundings of the area and formed in such a way that it is exposed as little as possible. This will have implications for the choice of building materials and color. (It is assumed that non-reflective materials and harmonic, nature adaptable colors (...) are used.

(Hvaler Kommune 2003:11).

## **Appendix 5: Dispensation applications to be reviewed by the County Governor**

### **The Coast**

All dispensation applications:

- Within the 100-meter belt in the RPR-O affected area with the exception of cabin extensions that are constructed facing away from the sea and that are no larger than 10-15m<sup>2</sup>
- Of significant character in the LNF-areas behind the 100-meter belt and that is located within the defined beach zone in the municipality plan
- That applies sea areas
- That applies to objects in the “Oslofjordverneplanen” proposal

### **Other areas of national or regional significance for outdoor recreation, biological diversity and cultural landscape**

### *Outdoor recreation.*

- Dispensation applications in larger connected forests (in LNF-areas without access to scattered settlements)

### *Biological diversity*

Dispensation applications that applies:

- Important areas that are registered to municipality action plans for biological diversity
- Important wild life areas
- Prioritized key biotopes in forestry
- Sea trout streams
- Locations entailing vulnerable and endangered species. (Red listed).

### *The agriculture cultural landscape*

- Dispensation applications that applies to areas listed in the rapport “*Valuable Cultural Landscapes in Østfold*” written by the County Governor’s office in 1999
- Dispensation applications is to be of concern when seen in a historical perspective

### **Other**

All dispensation applications;

- Inside or that borders to areas protected by the Conservation Act
- That applies to protection issues within the Conservation Act and that the municipality has been made aware of
- In no-intervention areas that have been pointed out on maps, sent by the County Governor
- In green areas that are located in the near proximity of schools, kinder gardens in cities, and that may have a potential when it comes to the institution’s teaching or the children’s playing
- Inside of that borders to recreational areas

- Other areas which the municipality believes to be of national or regional importance