# Public Access to Lakeshores in Iceland





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# Allmänhetens tillgång till sjös stränder på Island

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Elliðavatn, Þorsteinsvík

This is a 30 point master thesis for my Master Degree in Landscape Architecture at the Swedish University of Agricultural Studies in Alnarp.

When I was deciding on a topic for this thesis I knew I wanted to do something associated with recreation and Iceland. I contacted a former colleague at Reykjavík Energy, whom I worked for in 2007-2008, and asked if they owned any land that could be planned or designed with recreation in mind and together we decided on Porsteinsvík in Pingvallavatn. Meeting my instructor some months later, she suggested taking it 2 steps further and including the concept of public access to lake shores and adding another lake for comparison. I immediately loved the idea and contacted Kópavogur municipality for the chance to work with Elliðavatn, a lake close to where I grew up and with great recreational possibilities.

I want to thank my instructor, Gunilla Lindholm, for giving me a gentle push in the right direction every time we met. Thank you Bjarki Valberg and Hólmfríður Þorsteinsdóttir at Kópavogur municipality for your help and data. I would also like to thank Eggert Lárusson, Hannes Frímann Sigurðsson and Belinda Eir Engilbertsdóttir at Reykjavík Energy for the opportunity, your help, support, data and laughter. And last but certainly not least I want to thank my friends and family.

Sammanfattning
Abstract

Arbetets syfte var att bedöma det nuvarande läget gällande allmänhetens åtkomlighet till Islands insjöar och dessas strandlinje. Området har granskats relativt lite och markägare, liksom allmänheten, verkar inte känna till sina rättigheter och skyldigheter. Målet med arbetet var därför att samla information om vilka lagar och regelverk som gäller för åtkomlighet, undersöka den nuvarande situationen på två specifika platser gällande åtkomlighet till stränder vid insjöar och huruvida kommuner och markägare uppfyller sina förpliktelser att tillåta och underlätta åtkomlighet på dessa områden. Ett strandområde vid sjön Elliðavatn undersöktes liksom området Þorsteinsvík vid sjön Þingvallavatn. Undersökningsmetoder var de samma som landskapsarkitekter och planläggare använder för analysering och design, både i glesbygd och tätort; dokument- och landskapsanalys såväl som åtkomlighetsanalys och visuell analys. Det visade sig att dessa områden långt i från användes till sin fulla potential, kommuner och markägare uppfyller inte sina förpliktelser vad gäller att tillåta och underlätta åtkomst. Det finns ett behov för enskild utvärdering av varje plats som undersöks då villkoren skiljer stort och lagar och regelvärk måste vara tydligare för att bättre kunna tjäna allmänhetens intressen.

The study to assess the current state of public access to lakeshores in Iceland was done as little has been written on the subject and landowners and the public are not well-informed about their rights. The objective was to gather information about laws and regulations concerning accessibility, investigate the current situation at two particular locations regarding access to lakeshores and whether municipalities and landowners are fulfilling their obligations to allow and facilitate certain access to these areas. A lakeshore area by lake Elliðavatn was investigated as well as the lakeshore area Porsteinsvík by lake Pingvallavatn. Methods used were the same as landscape architects and planners use to analyse and design areas, whether in rural or urban landscapes; document and landscape analysis as well as accessibility and visual analysis. Expectations turned out to be exaggerated as the areas were far from being used to their full potential. Conclusions include a need for evaluating every location separately as conditions vary greatly and the laws and regulations must be clearer to better serve the interest of the public. Municipalities and landowners were not doing fulfilling their obligations to allow and facilitate access to the study areas.

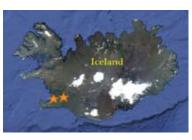
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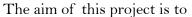
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# Public access & building on waterfronts - Introduction

# Background

Iceland is a 103.000 m2 island located in Northern Europe with a population of roughly 317.000 inhabitants. The capital is Reykjavík which along with its neighbouring municipalities is home to approximately two-thirds of the population (Hagstofa Íslands n.d.). The country is abundant in beautiful and spectacular landscapes, many of which are caused by the countries many volcanoes, hot springs and glaciers. The geothermal heat is a result of the geological fault which lies through the country, from north to south. Iceland has many specific characteristics that are uncommon in the world and therefore important to protect.



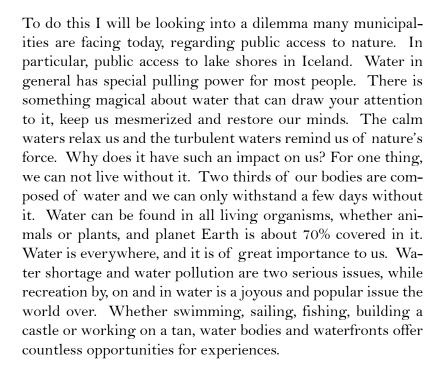


- Open a discussion on the issue of public access, to educate myself and others on the legal standpoints regarding this issue, whether lacking or fulfilling
- To address the importance of nature and recreation in our lives and our environment
- To analyse the current situation by lakes Elliðavatn and Þingvallavatn
- To offer ideas relating to opening up of the areas whether by design or strategies



The purpose of doing this thesis is to

- Educate myself and others
- Open a dialog that could lead to people questioning their environment, their needs & wants, and ultimately raise their environmental awareness
- To create a tool for Kópavogur municipality and Reykjavík Energy to use and build on, when making decisions for the areas



Building close to waterfronts has therefore become very common in Iceland and popular, whether residential houses or summerhouses. A location by the water shore is sought after and expensive due to the aesthetics of the site and the recreational opportunities it offers. This has become a problem though as the law states that houses should not be built closer to the shore than 50 metres, and that everybody should have equal access to the shore. Municipalities are now facing a dilemma, how can they ensure public access to lake shores when there are houses present and leases in place? It is a very difficult situation for many municipalities as they seek to do right by all, but are sometimes faced with areas that have not been



planned well, or at all, and need to find a good compromising route that ensures people's access to lake shores without compromising the house owner's rights.

I am interested in shedding light on the problem and gaining knowledge in the judicial aspect of it. By choosing 2 lakes that I know and love, the findings are of great interest to me. I would like to find ways to open up the areas so I and the rest of the public, can continue to enjoy them and their not so accessible sites.

#### **Environmental Awareness**

I believe that environmental awareness in Iceland is not very good. Despite Icelands abundance in natural characteristics and few inhabitants, many of us Icelanders seem oblivious to the treasure we "possess". Perhaps it is the fact that nature is all around us, we have unlimited access to clean water and the air, apart from a few days a year in the capital area, is always clean. Maybe our abundance is the reason for our limited awareness, or maybe most of us are aware and just take nature for granted.

In a semi-structured interview (Hallfreðsdóttir 2010), Icelanders were asked whether they believed Icelanders in general had a strong environmental conscience. 32% answered yes, while 62.8% answered no. Those who answered no were asked the follow up question: can you give an example of why that is? Here following are some of the answers.

"Carelessness I think or laziness."

"Take the clean nature for granted and feel like they don't have to make an effort for the environment."

"How we use the nature and treat it is for unknown reasons not enough in the hands of the people with skills and knowledge to make decisions but politicians."

"Recycling hasn't come a long way, green thinking in constructions hardly exists, the interests of nature come second to the interests of aluminium plants, consideration for the environment is none, coherence between actions and environment is little. ... People don't care about gas spending and car pooling doesn't exist."

"We are lazy when it comes to recycling and in many places it simply isn't an option. We don't conserve our water and use a lot of electricity. And yet we want to brag about our clean air and water."

Environmental awareness needs to be taught. It is not a knowledge we are born with. It is of great importance, as we should all be aware of the dangers the environment and its limited resources face. I think it is important to address this issue right at the beginning as this belief sets a strong undertone for the way I connect to this thesis. My choice of subject, the way I look at it and investigate it, and the discussions that follow are all affected by my own progression relating to environmental awareness and the fact that I believe that changes are needed in the way Icelanders view nature and the environment.

#### **Urban Nature**

Nature in towns and cities plays an important role in the ecosystem as well as giving us the close-nature experience. Large green areas, corridors, buffer zones, smaller green areas, connections to other neighbourhoods all play an important role. Green areas offer meeting places and opportunities for social contact. Close-recreational areas need to be within 8-10 min. travel time. In 10 minutes old people can go 2-300 m., kids 50 – 3/400 m., adults 3-400 m. and runners 800-1000 m. Green recreational areas can be divided into 5 categories. Each category is important to the city residences as well as being important to the city's flora and fauna as it offers a varied and balanced ecosystem with varied recreational options for all groups. The five categories are:

- 1. Nearby green areas
- 2. Larger recreational areas in cities
- 3. Smaller recreational areas in cities
- 4. Green corridors
- 5. Joint green areas in housing areas

(Nyhuus, A.-K. H. T. S. (1994))

# The Project Areas

The current situation by lake Elliðavatn is represented by it being mostly closed off from the public, without hiking trails and not feeling like a welcoming recreational area.

The current situation in Porsteinsvík, by lake Pingvallavatn, represents another example of an area that feels disconnected from the public; the lakeshore is inaccessible for the most part but it also feels like a beautiful and secluded area.

#### Method

The thesis looks at the current status of public access in the case study areas and comes up with suggestions for improvement. I used methods that planners use to analyse and design a piece of public space. An extensive literature study was executed that was divided into three parts. The first one focused on laws and regulations in order to gain information on the rights and obligations for all those involved; visitors, lease-holders and landowners. The second was a mixture of a literature study and data analysis, focusing on gathering as much information about the study sites as possible, looking at natural and cultural factors, doing a SWOT analysis and finding site specific information. This was done to achieve a thorough understanding of the sites and the challenges they presented. The third focused on conceptual and theoretical information concerning nature, recreation and/or various age groups.

The next step was the landscape analysis, which is an approach that is central to the work of landscape architects and planners. At this point it was important to go to Iceland and do an on-site investigation of the case study areas. The on-site investigation was an accessibility and visual analysis which consisted of walking through the areas on foot and by car to gain first hand experience of the sites, as well as taking hundreds of photographs of each site. Using this type of analysis gives very straight-forward information about the current status and how the average hiker may experience the areas, although these experiences run the risk of not being seen as conclusive. Each chapter ends with a general discussion or problem definition which is all tied together in the final conclusions at the end. It was important to separate all the information about each lake from the other, as they are so different.

#### Recreational Area & Activities

To realize the potentials and importance these areas could have for the sake of recreation, it is important to begin by looking at the recreational services and possibilities in the surroundings. The possibilities for recreation are numerous, whether you are located in the greater capital area or not.

#### Within the limits of the greater capital area

Elliðavatn is close to Heiðmörk, and Elliðaárdalur. Heiðmörk is a forested conservation area, located southeast of Elliðavatn. It is around 3.000 ha in size, there of are 800 ha covered in forests. It is a very popular recreational area with 9 rest areas (Skógræktarfélag Reykjavíkur (n.d.). Heiðmörk does not reach into Kópavogur municipality at the moment. Rauðhólar are pseudo craters northeast of Elliðavatn and have been protected since 1961. They are a part of Heiðmörk.



Elliðaárdalur is a beautiful and very popular recreational area that goes from Elliðavatn to the sea. The valley contains diverse nature, geology and animal life, thanks to the rivers Elliðaá that run through it. Elliðaárdalur belongs to Reykjavík municipality and is often referred to as the cities pearl, due to the fact that the rivers are salmon fishing rivers running through a capital (Orkuveita Reykjavíkur n.d.).

Öskjuhlíð is a tree covered hill in Reykjavík and one of the most popular recreational areas within the city with over 200.000 trees planted. It has a large net of bicycle and hiking trails as well as interesting historic and geological remnants (Orkuveita Reykjavíkur n.d.).

Viðey is a1,6 km² island just north of Reykjavík. It is an important historic site with very furtile soil (Reykjavíkurborg n.d.). Yoko Ono built a Peace Tower there in remembrance of John Lennon and their shared vision of "imagine peace" (Wikipedia, 2010).

Reykjavík Zoo & Family Park was opened in 1990. It is a theme park with over 20 animal species, all of which are native to Iceland.

2 camp sites, 16 swimming halls and 9 golf clubs can be found within the capital area.

#### Outside the limits of the greater capital area

Forests only cover a very small part of Iceland but increased interest in forestry has helped change the countries landscape and appearance in a relatively small amount of time. Several forested areas are in south Iceland, offering wonderful recreational areas.

The northern Hengill area, known as Nesjavellir and which the project area belongs to, serves as a source of hot water for the greater capital area. Geothermal heat and power is utilized in a geothermal power station belonging to the company Reykjavík Energy. Nesjavellir is popular as a recreational area as hikers can enjoy hot springs, geological, historical and volcanic remnants (Gíslason & Loftsson 1997). The adrenalin park can also be found here and offers recreation for thrill seekers. Mountain biking and cave exploring, ice climbing, diving and kayaking are all available in the near vicinity.

In southern Iceland it is possible to find 43 camp sites, 19 swimming pools, 7 horse rentals and 16 golf clubs. 2 skiing areas are within easy reach, Bláfjöll is the largest and most popular skiing area in Iceland, the other is Skálafell.

Pingvellir national park is home to the oldest parliamentary institution in the world (Wikipedia 2010) and has been on the world heritage list since 2004. It is Iceland's largest natural and historic wonder and a very popular tourist site.

Esja belongs to a volcanic mountain range and has been a favourite hiking destination for decades. Its hiking trails are divided into 3 sections, indicating their difficulty (Wikipedia 2010). Most of the trails are easy.

#### Recreation & Water

Water can have restorative, relaxing and/or empowering effects on people. Activities in and near water bodies include swimming, sailing, fishing, building a sandcastle or working on a tan, to name but a few. Water bodies and waterfronts offer countless opportunities for experiences, and a hike or a bicycle ride past them is a treat for the senses.

#### **Pingvallavatn**

Fishing is allowed from the 1. Of May – the 15. of September (Nordic Adventure Travel 2010). Fishing in Porsteinsvík is not allowed for the general public. The summer house owners have the right to fish there but a small area is reserved for Reykjavík Energy and its employees. Reykjavík Energy has a fishing guard on site.

The water temperature is around 3-4°C all year around, except in Porsteinsvík where the temperature can be anywhere from 11-19°C due to warm water coming from under the lava in Nesjahraun.

#### Elliðavatn

Fishing is allowed from the 1. Of May – the 15. of September (Skógræktarfélag Reykjavíkur. n.d.). The water temperature is around 2-5°C in the winter, but can reach 12-17°C during the summer (Reykjavíkurborg n.d.). And there for it could be an interesting place to play in. The currents in the lake can be strong in certain locations and it is not advisable to swim there.



Picture 2



Picture 3



Picture 4





#### Recreation – Definition:

1.refreshment in body or mind, as after work, by some form of play, amusement, or relaxation 2.any form of play, amusement, or relaxation used for this purpose, as games, sports, or hobbies (Your dictionary 2010)

#### Nature - Definition:

1.the material world, esp. as surrounding humankind and existing independently of human activities.

2.the natural world as it exists without human beings or civilization.

3.the elements of the natural world, as mountains, trees, animals, or rivers.

4.natural scenery.

5.the universe, with all its phenomena.

6.the sum total of the forces at work throughout the universe. 7.reality, as distinguished from any effect of art: a portrait true

any effect of art: a portrait true to nature. 8.the particular combination of qualities belonging to a person,

qualities belonging to a person, animal, thing, or class by birth, origin, or constitution; native or inherent character: human nature.

9.the instincts or inherent tendencies directing conduct: a man of good nature.

10.character, kind, or sort: two books of the same nature.

11.characteristic disposition; temperament: a self-willed nature; an evil nature.

12.the original, natural, uncivilized condition of humankind.
13.the biological functions or the urges to satisfy their requirements.

14.a primitive, wild condition; an uncultivated state.

15.a simple, uncluttered mode of life without the conveniences or distractions of civilization: a return to nature.

# Building on waterfronts

- Is it a problem?
- What does it mean to me?

#### **Nature & Recreation**

People seek out in nature for different reasons. Some seek excitement and thrill, like hiking to see a volcanic eruption, whilst others want peace and quiet. Then there are those that like watching animals, picking berries, clearing their head whilst enjoying a beautiful landscape to name but a few.

#### **Human Nature**

It is a common belief that everybody is entitled to live a wholesome life in a healthy environment. A life free from pollution and in harmony with nature. "Environmental justice is the principle that all people and communities have a right to live in a healthy environment and to have equitable access to sufficient resources to maintain a good quality of life." (Geography Graduate Group n.d.)

People are becoming more and more aware of the important role nature plays in our lives and the importance of protecting it. We couldn't exist if it wasn't for nature and its countless resources; after all we are a part of the nature. Our cultural growth has been substantial in the last few thousand years, and technological advances have certainly taken us to new levels of development. One of the most famous theories in the world, the theory of evolution, claims that our species (Homo sapiens) derives from apes. That would mean that the human being (Homo sapiens) would eat, drink, reproduce, die and decompose just like any other animal species on earth. And yet humans often find themselves disconnected from the natural elements, as their lives become more focused on and absorbed by consumerism and urbanity (Gather 2010).

# Nature & Recreation - Needs & Importance

Why do we need nature and recreation? Why is it important to us? Thinking of the questions from a few different standpoints brings us closer to an answer, but the final answer is most likely one that we must each answer for ourselves.

#### **Identity**

People use various things to identify themselves with. For some it's their work for others their nationality or religion. Today, many are increasingly identifying themselves with their recreational habits, such as being hikers, runners or soccer players. The reason for this could be because they seek companion- and friendship in those with similar interests, or because of the way it feels when partaking in recreational activities. It can be a time of self exploring, connecting with others, a time for making memories or just having fun.

#### **Social factors**

Despite our modern lifestyles, derived from industrialisation and urbanisation and have created a gap between humans and nature, we have a need for nature. And the further we alienate from it, the more we realise how vital it is. Today, we recycle. We use energy saving light bulbs and can't wait for a car that can run on sea water to come on the market at a reasonable price. Why? Because we have a conscience, and scientific data that tells us about the impact our lifestyles have on the earth and how our excessive way of living is a threat to it. By understanding our society and culture, we are more likely to come up with good tools for the preservation and protection of nature.

Recreation in the urban environment strengthens and maintains a healthy community by bringing people closer together, encouraging safer neighbourhoods and a livelier atmosphere. It enhances the area's desirability, its socioeconomic status and its image. Furthermore, outdoor recreation increases people's interest and political involvement in environmental issues (California state parks 2009).

#### **Economical factors**

Globalisation and consumerism can turn nature in a market place. That is why sustainability is crucial. The deteriorating health relating especially with obesity is a tremendous problem, and its consequences have only just begun to show. With more and more people being unable to work or dying young, they become a financial burden for the society. Hospital bills, unemployment wages and disability checks represent lost possibilities for companies, the general tax payer and the economy. Having a fully operational work force to drive any countries economic growth is becoming a rather distant dream. By opening up to the possibilities nature has to offer physically and mentally ill people, it is possible to bring that dream closer to reality.

#### Cultural factors

People's behaviour and values can be strongly influenced by the environment. A town with few parking areas, good public transport and a good network of bicycle lanes is very likely to have a high number of citizens who cycle instead of driving. Another thing that can be interesting to think about is how an area's terrain can influence our recreational options. If you live in a town surrounded by mountains it is quite likely that you will seek recreational opportunities relating to them such as mountain climbing or skiing. The mountain's presence makes it a possibility for you and gave also give you an edge when it comes to quantitative and qualitative training. Becoming a skier or mountain climber thereby becomes a part of your identity, which affects how you behave and the values you are surrounded.

"The nature and culture aspects of landscape are of particular interest because they are interwoven in just about all European landscapes as well as being two current environmental concerns. Europe possesses an enormously rich variety of cultural landscapes, often in small-scale mosaics, reflecting ownership or other patterns of social space. It is difficult to find areas in Europe without cultural influence. Cultural landscapes also contribute to a sense of place and local identity for the people who live there." (Wageningen UR 2006)

#### **Ecological factors**

Natural resources are limited, scarce and/or irreplaceable. Thinking of and using natural resources in a sustainable way has become imperative. It is important to remember that all species play important roles in our ecosystems and loss of one means imbalance in another. The productivity of an ecosystem is increased with biodiversity, creating a stronger and healthier ecosystem that can better withstand and recover from disasters (Global issues 2010)

"Greater species diversity ensures natural sustainability for all life forms". (Global issues 2010)

"Environmental sustainability is development that meets the needs of the present generation without compromising the ability of future generations to meet their own needs" (Geneseo 2009).

"Environmental sustainability refers to the environmental actions or impacts of what we do. In moving towards sustainability, we are attempting to reduce our ecological footprint or to tread more lightly on the Earth. This equates to reducing the amount of resources we use (and buy), the waste we produce and the emissions we produce. With every action impacting on the planets ecosystems, from the local to the global, the world is changing and it is not just the climate." (Griffith university n.d.)

# **Reat Areas - Their Importance**

Rest areas along with well organised and maintained hiking trails are excellent tools to use when guiding people around an area so that the environment won't come to any harm. They offer necessary resting points for all ages and groups. A rest area can be strategically placed to introduce something new or to protect something. They can be placed near sites with interesting views or at favoured photo opportunity locations.

# Nature, Recreation & Health

Recreation plays an important role of our lives. Our minds and bodies need rest, relaxation and enjoyment every once in a while; and that's where the benefits of recreation come into play. Stress and obesity are becoming ever increasing factors in modern life, resulting in numerous health issues that affect every aspect of people's life's and lead to countless hours being lost in the work field. Amongst the things that can be done to reduce stress, lose weight and improve our general wellbeing is to simply go outdoors. Health effects from going outdoors can include improved wellbeing, hormone balance, concentration and attention. (lecture: Bengtsson, Anna, 3. March 2009) Something as simple as going for a light walk can have a beneficial effect, and virtually all health risks related to being overweight are reducible by physical activity (Boldeman et al 2006). Physical activities can also result in significant mental health benefits and improved quality of life (California state parks 2009) with those who experience nature often being less effected by crisis than those who have few experiences (Ottosson 2007). Recreation in a natural environment can furthermore have a preventative and/or buffering effect for mental illnesses (California state parks 2009), as does having access to nature in everyday life (Ottosson 2007).

# Children, Play & Play areas

The biggest part of a child's day is made up of play and the majority of children in Iceland spend their days in childcare away from home. Unnatural elements and equipment are the norm and fears for the children's safety have become all too common. The way children play today seems to have changed a great deal from how it was. Gone are days of playing cops

'n robbers with the neighbourhood kids until late in the evening, and come have the days of computer games and social networking pages on the internet. The parents play a role in this development and according to a study by Veitch et al (2006), concerns about safety were most frequently identified by parents as the greatest obstruction to their child's independent mobility. Outdoor play should however provide children with the necessary, responsible risk-taking opportunities that support healthy growth and learning (Frost et al 2001 cited in Cosco 2005). Children need to be able to move around freely, to play and explore (Cele 2006). They need more than enclosed playgrounds and schoolyards to truly imagine, create and learn, it is however not easy to find such places in cities, and furthermore parents usually deem them as unsuitable because they can not keep a close eye on the children there. To be able to move about freely to play and explore is a vital part of childhood and often what springs to mind when adults remember their own childhood years (Cele 2006).

Physical activity has been shown to be important for children's immediate social, mental and physical health, as well as protective to health across the lifespan (Boreham and Riddoch 2001 cited in Veitch et al 2006) Researches show that playing in diverse environments can establish active behaviours and fondness for the outdoors in young children that can act as a preventive measure against sedentary lifestyles in later years (Cosco 2005). Further more, playing in natural environments teaches children about themselves and the environment by picking up environmental information and by performing developmental activities (Cosco 2005). Children who play in natural environments with a lot of vegetation develop much

better motor skills and are also forced to use their imagination to come up with new plays. A supportive environment can trigger a healthier behaviour in everyday play (Boldeman et al 2006) as well as more creative (Cele 2006).

# Teenagers, Play & Outside environments

Both children and teenagers need hideouts (Kylin, 2003; Lieberg, 1995). For children it can be a space filled with meaning, often areas (dens) that have been manipulated to some extent to mark a spatial boundary (Kylin, 2003). For teenagers it is also an area where they can rehearse for adult life (Lieberg, 1995). Interestingly, hideouts are mostly found and created in green areas and factors such as the outdoor design and the vegetation played a role when they chose just these places (Kylin, 2003). Furthermore, a green environment triggers physical activity (Boldeman et al, 2006) and gives children an opportunity to feel independent and free, which they highly value (Cele, 2006).

Over planned outdoor environments can be found in every city in every country, where every square meter has its predetermined function, completely void of surprises and adventure. These sorts of areas do not encourage teenagers in using these places. The city and its public spaces are environments that teenagers desperately need, to grow socially, to seek fellowship, and to form their social identities. The reason they spend so much time in public spaces can be explained in part by the fact that, in comparison to adults, they have little other choice (Lieberg, 1995). Public spaces are most often designed with predestined functions that cater to specific user groups







Picture 6



such as children, family units or animal owners. The teenagers get left out and have to find their own uses and claim the space as their own, so it serves a different purpose than first intended.

"Meeting points, often at intersections or street corners, function as gathering places before the teenagers move on to other places. Border zones at the edge of the neighbourhood or between two blocks or housing areas are where teenagers can both withdraw and show themselves. Haunts and hangouts give youths a chance to experiment by themselves and test styles and forms of expression within the frame of creative, symbolic work. [...] The creation of open and dissolved spaces offers good opportunities, at least concerning places of retreat and border zones. On the other hand, it appears to be more difficult for youths to find places of interaction in this environment." (Lieberg, 1995)

# Seniors & Nature

Older people often live alone and run a risk of being cut off from the community mainstream. By bringing them out into nature or recreational programs, the chances of them feeling depressed, isolated or lonely are greatly diminished. Fewer doctor visits, less medication and decreased pain are other beneficiary effects (California state parks 2009)

# Building on waterfronts

- Where do I stand?
- What do the laws say?

# **Environmental Right**

Environmental right is a human right. The individual's right to a clean and healthy environment is ever increasing. The goal is to protect the environment and encourage individuals as well as future generations will be able to enjoy the qualities that are associated in a healthy environment and nature resources. The focus within environmental right has been shifting from trying to fix what has gone bad to preventing damage. Now the preventive approach is dominant. It is suggested that environmental issues be resolved within municipalities, as encouraged by Agenda 21 (Örlygsson n.d.)

# **European Convention on Human Rights**

- 1. "Everyone has the right to own, use, dispose of and bequeath his or her lawfully acquired possessions. No one may be deprived of his or her possessions, except in the public interest and in the cases and under the conditions provided for by law, subject to fair compensation being paid in good time for their loss. The use of property may be regulated by law in so far as is necessary for the general interest."
- 2. "Intellectual property shall be protected. Everyone has the right to respect for his or her private and family life, home and communications" (European Parliament n.d.).

# Declaration of the United Nations Conference on the Human Environment, Stockholm convention 1972

"Man is both creature and moulder of his environment, which gives him physical sustenance and affords him the opportunity for intellectual, moral, social and spiritual growth. In the long and tortuous evolution of the human race on this planet a stage has been reached when, through the rapid acceleration of science and technology, man has acquired the power to transform his environment in countless ways and on an unprecedented scale. Both aspects of man's environment, the natural and the man-made, are essential to his well-being and to the enjoyment of basic human rights the right to life itself."

"The protection and improvement of the human environment is a major issue which affects the well-being of peoples and economic development throughout the world; it is the urgent desire of the peoples of the whole world and the duty of all Governments."

(United Nations Environment Programme n.d.).

# Strandskydd

The Swedish shore protection (Strandskydd) could be used as a guide for Icelanders should they ever take a step further in clarifying the current regulations and laws regarding water protection, privacy and accessibility for the public.

The Swedish shore protection has very straightforward rules abound what is allowed and what is not. Within the shore area, buildings or their usage can not be changed or other facilities or equipment done, if it prevents or deters the public from gaining/having access to an area where they would otherwise have travelled free. The zone stretches from 100 metres from the shore in each direction, with the possibility for municipalities to expand it up to 300 metres.

"The shore protection was established to prevent overexploitation of the beaches and preserve the public's access to beaches and water for recreation. It was expanded in 1994 to include the protection of the beaches because of their importance for biodiversity. It is valid throughout the whole country, regardless of how dense or sparsely populated the area is [...] or which habitats, biotopes or species are in the area." (Naturvårdsverket 2010)

It is prohibited to:

Moe the grass, put out pots, make roads or fences, or otherwise do anything that might suggest that the land is owned by a member of the public and therefore off limits. It is not allowed to enter a site if a house is less than 100 metres from the shore, due to privacy issues. (Lecture: Lerman, Peggy 30.nóv 2009)

Construct a new building, dig or otherwise make preparations for buildings

Change the buildings that already exist so that they can be used for any other purpose

Perform other instillations or devices that reduce the availability under common rights or impair the lives of plants and animals. Examples include marinas, piers, parking lots and golf courses

Perform other actions that may harm plants and animals, such as cutting down trees, digging or fertilizing.

If you wish to do any of this, you must apply for an exemption from the ban. In order to be granted one, you must show that there are so-called special reasons (Naturvårdsverket 2010)

#### The Constitution

Everybody should enjoy the privacy of their personal life, home and family. The right of ownership has to be respected. No one can be forced to hand over their possession unless it is needed for the public. Legal orders are needed to enforce this and full compensations to be made (Alþingi n.d.).

There is no mention of the full extend of the law towards people's privacy. For example, it is stated in the Swedish strandskydd law that homeowners are guaranteed privacy if their house is located less than 100 metres from the shore. The strandskydd law therefore takes the law further to ensure both the homeowners privacy but also the public's access to lakes. A drawback to this is however that if a house is closer than 100 metres to the shore, the public's possibilities for access are greatly diminished as it is highly likely that homeowners would want to build relatively close to the shore.

# Authorities and regulations

The goals of planning regulations are to ensure sensible and practical use of land and land qualities. To ensure the protection of natural and cultural valuables and prevent environmental damage and over utilization, with its main focus on sustainable development. That the development of residential areas and land use in the whole country is in co ordinance with organizational plans that have economical, social and cultural needs of the nation, their health and safety as a guiding light (Reglugerðasafn n.d.).

In support to recreation, municipalities, the environmental agency or nature protection committees can request to keep open; paths, beach areas for sea bathing, water banks and other paths and areas desirable for keeping open to ease the public's opportunities for enjoying nature; further more install bridges, gates and paths and mark off a camping site and do whatever else deemed necessary. These constructions should only be done with the agreement of the lands rightful owner (Alþingi n.d.).

If buildings, cars, tools or structures, including fences, have been left recklessly behind and are breaking down in a way that can be considered damaging or an eyesore, the owner is obliged to remove it. It is the responsibility of the municipality to take care of those changes needed on the expense of the owner if he is unwilling to go through with them himself (Landssamband sumarhúsaeigenda n.d.).

# Travelling in Iceland

Everybody is allowed to travel around Iceland and enjoy its nature as long as they treat it well. It is allowed to travel through uncultivated land without permission. Landowners are to ensure that travellers can go past/along water banks and beach/coast and after historical paths and organized paths. Where there are barriers there should be gates or stairs over fences. Water banks are often important habitats and should be treated carefully.

Travellers should not take shortcuts through private property and respect rules on traffic in areas where animal life or vegetation is being protected. They should follow marked paths as paths are made to increase people's safety and guide them on their way and decrease the pressure on nature (Umhverfisstofnun 2002).

People are only allowed access to privately owned lands if they are uncultivated and unfenced, and if their stay does not carry any disturbance to the livestock or inconvenience for the landowners. If a land is fenced off it requires the landowner's permission to travel through or stay on it (Reglugerðasafn n.d.).

# Accessibility & The Law

Construction sites shall not be positioned closer to property lines than 10 meters. (Reglugerðasafn n.d.).

The nature protection law mentions an exception from people's obligation/authorization to fence off their land. It states that it is not allowed to place buildings, fences or other structures on the sea coast, water bank or river bank, so that it hinders the traffic of hikers. It does not however apply for buildings or structures that are necessary for business reasons, including the residential housing of farmers, nor those constructed with the authorization from the proper authority.

This provision includes summer houses. The reason for this is that they are often built very close to water banks and a fence is raised around the land. The fence hinders normal and natural traffic of the public, who often choose to walk along the water banks.

The reason for this provision is said to be social attitude, that is nature is the joint possession of the nation, not only those above ground, but also those that are gone and those that have not yet been born. This attitude ways so strongly that minor restrictions on those in the position to own plots in the most beautiful places in the country, seem justified.

In its original form this provision stated that it should not be allowed to fence off or raise a structure within 100 meters form the waters edge. Whilst being discussed in congress, it gained its present form due to the reasoning that it would make forestry very difficult, and especially that it would be extremely difficult and expensive to demand fences, summerhouses and other various structures present within these areas to be removed. They therefore stated that if it was present before the law was issued it was allowed to remain (Landssamband sumarhúsaeigenda n.d.).

# Report from the Water-Law-Committee, 2008

A committee was assigned to review the changes in Icelandic water laws. The law professor Sigurður Líndal interpreted what the changes in the laws meant for the public's access to lakes within private lands. He interpreted the new laws as being more in favour of the owner's right and less of the public's right, and that the wording does not increase the public's right in any way from the old version of the laws (Vatnalaganefnd 2008:69).

The environmental agency as well as various other agencies believed that the bill (proposed law) minimized the rights and interests of the public and the nation as a whole. They believed that it "went against the water directives goal where it is declared that water as such is not a businesslike unity but a common heritage that should be preserved, protected and treated as such." That it was inconsistent to legislatives in neighbouring countries, Sweden and Norway. And that it did not take into consideration the biological and social importance of water (Vatnalaganefnd 2008:88).

The Icelandic Institute of Natural History emphasised on water being a vital resource and heritage to all mankind and all life on earth. The institute believed that ownership over water was overly emphasised while the public's right to the countries resources and especially water in all its forms, should be strengthened (Vatnalaganefnd 2008:89).

It should be stated that these believes do not (necessarily) refer directly to the concept of public access to water, but to water in general, in any location, situation or form.

# **Specific Areas**

The biota of Pingvallavatn shall be protected (Alþingi n.d.).

Pseudo craters are amongst geological formations and ecosystems that require special protection and any interference with them should be avoided at all cost (Landssamband sumarhúsaeigenda n.d.).

#### **Definitions**

The project area around Elliðavatn is defined in accordance to planning laws as:

- open space
- residential area
- agricultural area
- water protection area
- national relic protection area (Pingnes)

The project area in Porsteinsvík is defined in accordance to planning laws as:

- off-season habitation
- regional protection
- water protection area
- nature protection area (Pingvallavatn)
- open area for specific uses

# **Open space**

Open space are for common recreation or limited traffic of people and where no structures are presumed, including forestry areas others than agricultural forestry on farming grounds and land reclamation areas.

#### Residential areas

Residential areas should first and foremost presume residential housing. Operations related to servicing the residents is allowed, for instance shops, clean industry, play areas and service operations or any other operation that should not cause any nuisance due to odour, noise or uncleanliness nor attracts an unusual amount of traffic.

# Agricultural areas

Agricultural areas cover all area owned by the farmer and should first and foremost assume buildings and operations that are connected to the lands farming operations.

# National relic protection area (Pingnes)

Applies for any areas where protected archaeological remains, known remains or protected structures according to the national relic laws are located.

#### **Off-Season Habitation**

Areas for off-season habitation, that is, habitation that is not permanent. They are to give an option for a varied recreation and not to hinder access to lakes and beach areas or other areas, special due to nature and environment.

In site plans for rural areas it is to be ensured that no constructions take place closer to waters, rivers or sea than 50 meters and that there will not be any hindrances for those walking along them. (Reglugerðasafn n.d.).

Off-season habitation that lies next to sea, rivers and waters shall have at least a 10 meter area where those travelling on foot are free to roam. In this area it is authorized to allow the construction of a boat storage as that does not hinder the traffic of hikers along the bank (Landssamband sumarhúsaeigenda n.d.).

#### Uninhabited areas

Uninhabited areas are open areas for common recreation or limited traffic of people. They are not expected to undergo constructions, including forestry areas other than agricultural forestry and land reclamation areas.

If constructions are planned within an uninhabited area, for example paths, it might be necessary to make a site plan (Reglugerðasafn n.d.).

# **Regional Protection**

Definition: Provisions in a regional, master or site plan concerning the protection of the characteristics of the older residential areas or other cultural-historical remnants, nature remnants or tree growth without a formal conservation plan being issued (Landssamband sumarhúsaeigenda n.d.).

Regional protection is decided by the municipalities and revolves around limitations of land use. A certain aspect of likely interest to the municipality or nation presently or in the future is acknowledged and taken aside (Skútustaðahreppur n.d.).

It can be issued to maintain the characteristics of older houses or other cultural historic remains/remnants, including vegetation, if it considered preferable to protect due to historical, natural or cultural values, without it being a formal protection.

Areas under regional protection shall be mentioned in master and regional plans, their location, main characters and rules for each regarding land use, how people conduct themselves there and constructions. If a confirmed regional protection is in order according to the master plan, the area needs a site plan (Reglugerðasafn n.d.).

#### **Water Protection Areas**

Water protection areas are categorized as follows to protect against water pollution:

I. Category: Well region

II. Category: Near region

II. Category: Distant region

(Reglugerðasafn n.d.).

# Nature protection area (Pingvallavatn)

On one hand protected areas, that is nature reserves, national parks, country parks and natural monuments, and on the other hand areas listed by the nature conservation register. Also specific areas on land and sea that are protected for their nature or landscape.

# Open area for specific uses

Areas with recreational values in one way or another with presumed structures for the operations that take place there, for instance parks, shooting ranges, cemeteries, play areas and forestry areas to name a few.

#### Conclusions - You & Your Environment

With our need for recreation and nature, and our fascination for water, spending time by lakeshores becomes an excellent way to spend our time.

Unfortunately not everybody is aware of the beneficial effects nature can have on our bidues and minds. Many have difficulties telling animal and plant species apart and far too few have felt the spiritual experience it is possible to have when taking in nature.

Thankfully more and more are becoming aware of this and contribute to the preservation and protection of nature.

Those who enjoy nature and are aware of its beneficial effects can find themselves uncertain of their right to the environment. It is important to know your right. If you don't, it is a lot easier for others to trample on it.

Knowing your rights and knowing your environment has a positive effect on your wellbeing.

# Building on waterfronts - Case Study

# Elliðavatn

Elliðavatn is located within Kópavogur and Reykjavík municipality. For this thesis only the area within Kópavogur was looked at.

#### Contract of ownership

The area is mostly owned by the farmer Porsteinn Hjaltested in Vatnsendi, but Kópavogur consults with him on the area's planning. Lands for residential houses have been sold to the houses owners.

# Master plan for Kópavogur municipality 2000 - 2012

The master plan for Kópavogur municipality was verified in 2002. Master plans are made for municipalities and are valid for at least 12 years at a time. There the municipality has to verify future aims in land use, settlement development, transportations, environmental issues etc. (Skipulagsstofnun, n.d.) The master plan was done at the same time as the regional plan for the greater capital area, as well as an environmental policy based on Agenda 21 for the municipality, therefore they are all in coherence.

In the year 2000 the inhabitants of Kópavogur were 23.527 (Bæjarskipulag Kópavogs 2002:22). In 2009 they were 30.314. (Kópavogur.net) This rapid change was anticipated as inhabitants were expected to reach 32-35.000 in 2012. The economic downfall of Iceland halted that development slightly. The largest part of the newly developed sites expected to bear this increase, are situated next to the project area in this thesis.

The project area is located within the hilly heath area of Vatnsendi and offers varied possibilities for recreation. The municipality's aims are for most citizens to be able to enjoy the area and that the characteristics of both the residential and open areas are preserved so they can create a diverse environment with varied options for recreation (Bæjarskipulag Kópavogs 2002:41). It is suggested that Vatnsendavatn\* will be put under a protection called town protection and that within the lake's protective area of 50 meters, there will not be allowed any new residential houses. (Bæjarskipulag Kópavogs 2002:30)

The area is to be planned so that people can enjoy recreation, such as riding, fishing and hiking in as unspoiled environment as possible. The planning should be done with consideration for the homes, summerhouses and plots present within the area (Bæjarskipulag Kópavogs 2002:29). The area is defined as an open area on one hand, and an agricultural area on the other.

\*Elliðavatn used to be two lakes, Elliðavatn situated within Reykjavík boundaries and Vatnsendavatn situated within Kópavogur boundaries. In 1924–25 a damn was built which joined the two lakes together and it is now known as Elliðavatn. Here the reference to Vatnsendavatn is therefore to the part of the lake which belongs to Kópavogur municipality.

# Site plan, 2001

The majority of the Kópavogur project area last underwent planning changes in 2001. The area was referred to as the area between water and road, and consists of 37 ha in the northwestern part of Elliðavatn. This area has been defined as an open area on one hand, and an agricultural area on the other.

#### Regional plan for the greater capital area 2001 - 2024

The regional plan for the greater capital area was verified on January 10th 2003. It is a joint effort of the eight municipalities making up the greater capital area. These municipalities are: Reykjavík, Kópavogur, Garðabær, Mosfellsbær, Seltjarnarnes, Kjósahreppur, Bessastaðahreppur and Harnarfjörður. The aim of the regional plan is to create a common vision in the structure and residential development for the following quarter of a century (Nes planners 2002). If two or more municipalities feel the need to coordinate and establish a joint policy regarding certain aspects of land use and development of residential areas, they can make a regional plan. The goals in the regional plan shall be valid for at least 12 years at a time and include the municipalities' entire land (Skipulagsstofnun n.d.).

#### Recreational areas, 1998

This is an information pamphlet that highlights the town's recreational areas and their speciality. Here it is possible to read about the municipality's emphasis for the Vatnsendi area, which is to nurture the area as a common recreational area, to ensure good walking trails with rest stops along and around the lake, and to protect the areas biota (Bæjarskipulag Kópavogs 1998:21). As the population moves further into the land at a fast rate and the access to the heath areas in Vatnsendi gets better, the popularity of these areas for recreational purposes increases (Bæjarskipulag Kópavogos 1998:22).

Within the municipality are between 1100-1200 horses along with excellent facilities for competing and taming. An extensive system of riding trails extends into neighbouring municipalities (Bæjarskipulag Kópavogs 1998:18). The forested area

to the south is about 100 ha in size and connected to the neighbouring forested areas. It is connected to residential areas and expected to become one of the most sought after recreational areas of Kópavogur as well as the greater capital area (Bæjarskipulag Kópavogs 1998:22).

#### Public participation event, 2006

The event was managed by the consultation company Alta for the municipality. The conclusions were among others that green belts should be kept surrounding the town to protect landscape unities. Connections between neighbourhoods need to be improved with green areas, paths and public transportation (Alta 2006:2). The environmental quality the town has, between mountain and seashore should be used to the fullest. Open areas and recreational areas need to be better connected, as people felt that the recreational areas within the town were becoming too small. The town has been building up so fast so these areas are getting lost and forgotten (Alta 2006:8). The participants wanted to see changes to the paths system, the lighting and benches along them, as well as more information signs (Alta 2006:9).

# Relics in Kópavogur, 2000

Due to a revision in the master plan it was decided to document any relics that might be present within areas that were expected to go under construction in the near future (Einarsson, B.F. 2000:3). 53 locations were listed, of which three are within the project area. One of those is Pingnes, a protected area since 1938. It is possible that Pingnes is the oldest area of congress in Iceland, but this has not been proven and it is uncertain whether it will ever be possible to investigate fully. Pingnes has a high conservation value and is considered in

little danger from damage. The other locations are a homestead garden and a hill of ruins.

#### Paths, 2002

The public is to be able to travel safely on paths, whether on bicycle or foot, all year round. The municipality wants to lay new hiking and riding trails in the outskirts of town to increase the public's options for recreation (Bæjarskipulag Kópavogs 2002:57). No new paths have been laid in the project area, but an interest in it has been around for many years. Suggested path locations seem to have been chosen for obvious location reasons with no regard to present barriers.



Location of relics

#### **Discussion**

The municipality's vision for the area is not connected to the reality of the site and it appears to either have been forgotten or brushed aside.

The municipality's hopes for the area are clear when looking at documents such as the master plan and recreational areas. They acknowledge the fact that the area and its surroundings are going to increase in popularity and suggest the area be nurtured as a common recreational area whilst protecting its biota. It is to be planned so that people can enjoy all the recreational options the site has to offer, but there is also a need to take into consideration all the structures that are present.

This consideration is where it gets tricky. These structures are creating hindrances for the public and the successful planning of the area. Many of them aren't defined as off-season habitation areas. In fact, they aren't defined at all. The area is defined as open area and a few of the summerhouses aren't even on the master plan, the site plan or the municipalities GIS website.



#### **Natural Factors**

# Vegetation

To the north and west of the lake, the vegetation is dominated by grassland. Summerhouse owners have planted large amounts of coniferous trees within their lands to the west and southwest, while the natural vegetation of moss, heath and shrubbery can be found to the southeast. Gravelly areas are can be found throughout the area and large rocks are visible and very common within the natural vegetation.

Elliðavatn is shallow and very rich in vegetation. Bottom plants in the lake are very obvious, with Alternate Water Milfoil (Myriophyllum alterniflorum) and Broad-leaf Pondweeds (Potamogeton spp.) (Kópavogsbær n.d.).

#### Geology

Elliðavatn is a springwater, like Þingvallavatn. They are both in lava areas with many springs, so their off flow is much greater than is able run in.

Myndunarsaga Elliðavogslaganna og Reykjarvíkurgrágrýtisins er í stuttu máli þannig: Meginjöklar gengu yfir Reykjarvíkursvæðið og mótuðu mishæðótt landslag á ár-kvarteran berggrunninn. Þegar jökullinn hopaði í lok þriðja síðasta jökulskeiðs fylgdi sjórinn honum eftir inn yfir láglendið. Sjávarset settist í allar lægðir í berggrunninum. Ofan á sjávarsetið lagðist síðan árset, landið var risið úr sjó. Þá tóku ár og lækir að grafa sér farvegi í setlögin, en jafnframt tóku plöntur að nema land en leifar þessa gróðurs er einmitt surtarbrandurinn í Háubökkum og undir grágrýtinu í Ártúnshöfða (Ferlir 2007).

#### Animals

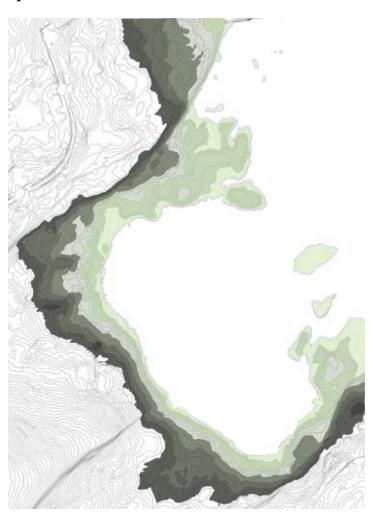
Animal life in the shore line is very rich and with the richest known around lakes in the country. Elliðaár and Elliðavatn along with nearby wetlands form a rich ecosystem (Kópavogsbær n.d.). Wild mammals in the area are minks (Mustela vison) and field mice (Apodemus sylvaticus) (Guðnadóttir & Jóhannsdóttir 2006).

Five species of wild fresh water fish live in the water system; Arctic Charr (Salvelinus Alpinus), Atlantic Salmon (Salmo salar), Eel (Anguilla anguilla), Stickleback (Gasterosteus aculeatus) and Brown Trout (Salmo trutta). Trout fishing in the lake is popular (Kópavogsbær n.d.).

In the water system area have been document thirty species of wetland birds, there of nine rare. The most common birds include: Whooper Swan (Cygnus cygnus), Greater Scaup (Aythya marila), Greylag Goose (Anser anser), Common Loon (Gravia immer), Eurasian Wigeon (Anas penelope), Lesser Black-backed Gull (Larus fuscus), Tufted Duck (Aythya fuligula), Mallard (Anas platyrhynchos), Great Black-backed Gull (Larus marinus) and Red-breasted Merganser (Mergus serrator) (Guðnadóttir & Jóhannsdóttir 2006).

# **Natural Factors**

# **Spatial Conditions**



#### Protection

The whole project area falls under water protection. The southern part is categorized as a well region (I. category), the other as a distant region B (III. Category) (Heilbrigðiseftirlit Kjósarsvæðis 2010).

The lake, its closest environment, the vegetation and birdlife is under regional protection and is on the nature protection registry (Kópavogsbær n.d.). Three locations with relics are within the project area (Einarsson 2000)



Regional Protection of 50 metres

**Cultural Factors** 

# Roads, Paths, Trails & Buildings



# **Fences**



# **SWOT Analysis**

The area's strengths is the closeness to nearby recreational opportunities so connecting the area to them is easy. The beautiful nature to the east and south is a big attraction, while the fences and houses that close off the lake shore as well as the land ownership issues represent the area's biggest weaknesses by far.

Opportunities include nature teaching and increased recreational areas. The biggest threats are the land owner or municipality allowing more residential buildings or the area getting left in the planning process.



#### **Need and Problem definition**

The main problem this area is facing regarding recreational possibilities is the lack of accessibility to the lakeshore. It is unapproachable in far too many places.

The area has been forgotten, and lacks vision. Many hindrances in the form of fences and summerhouses result in people not feeling welcome.

The area needs at least one new rest stop, as the two meeting places there today are not living up to their potentials.

The summerhouses are often very close to the lake and fences going far into the lake, forces hikers up on the roads and away from the lake. In some locations the fences can be seen as necessary and justified. In others they are rundown and pointless. Most of the summerhouses and boat houses are also worn down.

Paths don't go into the area, forcing hikers to use roads or horse trails.

# **Aims & Strategies**

Open up the area for the public

Make a strategy plan

Connect it to nature education

# Accessible



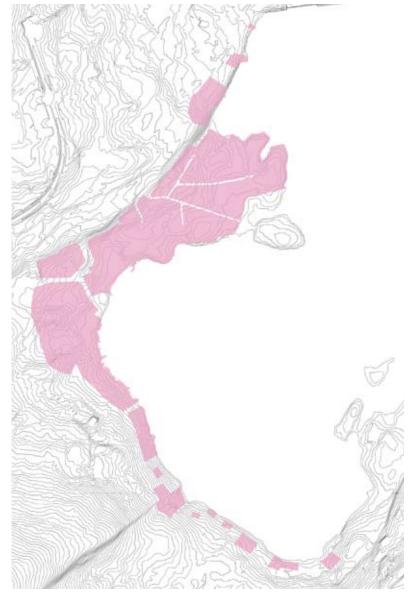
Whether areas were accessible or not was determined by the following factors;

Am I physically capable of entering the area?
Can I walk on the path?
Can I drive on the road?
Can I ride on the horse trail?
Can I cross the field?

Are there hindrances or is something physically blocking my way?

Am I uncomfortable going through the area or close to it?

# Not accessible





A parking lot and a grassy area with a bench. It is not very welcoming but provides somewhere to park and access to the lake. Next to it is a boat house on two floors and the property is enclosed with a red picked fence which denies you the chance to walk next to the lake.

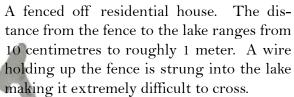




#### Location 2

On the other side of the property is a rather steep hill leading down to the lake, with grass and angelicas. Heath vegetation, moss, birch and large rocks appear in the steepness.

A very small house surrounded by a stone wall looks charming from a distance, but once you get close you see that it is built from leftover materials and has been badly treated over the years. Because of the state of the house, it should be removed and the stone wall left to stay.











#### Between 2 and 3

Another steep hill with the same vegetation as mentioned for location 2. As a considerably large site it could serve as a view point. The fact that the lake shore is very steep prevents it from being an ideal rest area.



A fenced off residential house. Distance from fence to lake ranges from roughly 3 meters to 0. An old concrete boathouse cuts the shore and into the lake making it impossible to pass. A low concrete wall descending from it reaches several meters into the lake. The boathouse is not being used anymore.



At the highest point is a gravel area that divides the horse and pedestrian path and has great potential. It can serve as a view point, a meeting point and a rest stop. A site that draws people into the area, and reminds drivers of its existence, as well as being a connection between neighbourhoods. It is possible to walk down to the lake and enjoy the lake shore in a small but wind protected and cosy site, fenced off by the neighbouring houses. The hill is very steep so stairs would be necessary. The area needs some form of irrigation or large amounts of vegetation as the soil is very soggy.



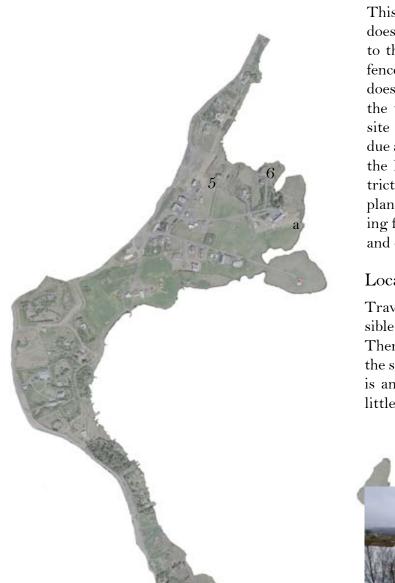








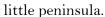




This location refers to the area that does not have immediate access to the shore. It has been built and fenced off to such a degree that it does not feel inviting, nor a part of the whole lake experience. A new site plan for the area is long overdue as well as efforts to connect it to the lake and the neighbouring districts Ping and Hvörf. A new site plan would hopefully result in making finishing touches to roads, paths and open areas.



Travelling along the shore is possible right until you reach point a. There a fence reaches the lake. To the south of that and the guesthouse is an open area that leads you to a



















Here, a summerhouse and stables are at the highest point and the peninsula's centre. It is possible to walk around the house as well as skipping it all together and heading further south. There you will once again be confronted by fences limiting your space to walk along the shore.



A summerhouse is fenced off, leaving only a 0-2 meter space between shore and fence. At the end of the land is a fence that reaches far into the lake, resulting in wet feet if you try to pass.











The next land belongs to the farmer Porsteinn Hjaltested in Vatnsendi, the primary owner of all the land within the project area. He has many buildings on his lawn as well as fences. All in all, there are three fences within his land that go into the lake, and so his land can be seen as a major hurdle for hikers. When entering this area from above (west) all the structures and fences create an unwelcoming feeling.











This location seems to have been planned with horse trails in mind, and they do serve as such today. It does need to be completed though as it does not depict a clean city environment. Although the project area is partly representing the countryside within the city, a clean and tidy environment does not contradict the image of the countryside and should be upheld throughout.



#### Location 11

Hidden behind coniferous trees is a residential house. The owners have a chicken coop, much to the delight of residents in neighbouring districts. Walking down the road felt like I was trespassing and I soon realised, I was. The road had in fact been a long driveway not a road.







The next road is indeed a road even though it looks less like a road then the one in location 11. In fact it also serves as a path and a horse trail. On one side there is an open land with grassy knolls, trees and a small hill. In the spirit of the project area, it too is fenced off. And the same thing can be said for the house on the other side off the road.

It leads down to the lake, to a rather reclusive location, with views over the lake and protection from the elements as coniferous trees create shelter from the wind and the sense off having left the city behind you. Cars have been driven on the grass a few to many times, and ugly tracks have damaged it and made it rather unpleasant. Unfortunately it has a residential house on one hand and a farm on the other, but with careful planning it could be a nice rest or play area.



Once again a wire to support the fence goes into the lake and blocks the way. If you take the chance to climb over it, you will get about 1 metre of space to walk along before the fence goes well into the lake and blocks the way. The summerhouse is very close to the lake and it is a likely guess that the owners have thought it ok to block others from coming to close to their house.

















- Another fence reaches into the lake next to an old boathouse that has not been in use for a long time. This land belongs to the association of disabled in Iceland and has been designed with their needs in mind. The design is simple, but allows people in wheelchairs to reach the lake. Two bridges and another boathouse later, it is time for the next fence, reaching far into the lake and with two wires to hold it in place.















# l i

Location 15

damage on site.

#### and even a few smaller ones right by the shore, creating a screen for the lake. A cosy site that should very nice in the summertime. Another fence and another boathouse along with a 15-20 meter gap between fences. The next site is relatively open as far as vegetation goes, but attention should be made

to the wooden and concrete leftovers that should be removed. Slight erosion

A lot of coniferous trees and birches.

Another site, another fence. But it was at this site that my jaw dropped. Not only was the land fences off, but it had been made virtually impossible to enter. The owners have made two steep, swerving lookout points right next to each other. In order to access the lake shore, it is necessary to walk right next to the house and most definitely violate the owner's right to privacy. A lot of structures have been made, many of which were a horrendous eyesore. It would be my recommendation to remove this summerhouse and clear the site of any remains from the current owners. Constructions here are certainly not meant to blend in with the surroundings. Once the ugly view point has been crossed, it is necessary to crawl through a picked fence and jump down approximately 1 1/2 meter drop. Next to walk along the picked fence for a short while until you finally reach sweet freedom.

















The next fence was much to my delight not by the lakes edge and I had a good three meter space to walk through. The fence itself was however a new chicken wire stainless steel monstrosity that looked out of place in this semi natural environment. The boathouse that greeted me has seen better days and should be removed.







Driving along the road will get you to location 18. At that point the road changes character and you are reminded that it is in fact a wide horse trail. Snow or rain will make it impossible to drive further unless equipped with an SUV. Walking this way is rather pleasant as the trail winds up and down through the landscape and you can enjoy the lake on one hand and small summerhouses that look old and cute from a far.











A meeting place with a horse stop over and a bench. A fence runs through the area from lake shore far up the hill. This fence marks the forestry line. A car can not get beyond this point as boulders and gates block the way. This could make a good view and meeting point as it offers a great view and has already been made relatively large. The trees also offer a nice backdrop. The vegetation is beautiful here, moss and lichen covered rocks blend well with few angelicas, a bit of grass and a lot of heath vegetation. The occasional coniferous tree have been planted which might not have been such a good idea, but remains to be seen. The beauty of this site stands well on its own and if trees are needed or desired here, it would be ideal to plant birches as they belong in this land-scape far better then the blessed spruce.







Walking in between the trees creates a welcoming feeling. They are not too dense to block out the view, and not so sparse that they fail in creating a sense of being within.



Pingnes, an important historical site. Despite this fact the land has been leased out to a summerhouse owner that has not taken good care of it. The main disturbances are by the sites entrance. The municipality line runs straight through Pingnes and even though only a small portion of it falls on Kópavogur's side it is important to consider the whole site due to its cultural and historical importance.

The grassy/mossy knolls and the heath vegetation make this a pleasant site with a great view. Some erosion has occurred by the lake shore.















A nice area to stop by and enjoy all the rocks in the lake. The shore line here has some special element that is fun to stop and contemplate over, but the summerhouse is close and you feel unwelcome.





#### Location 23

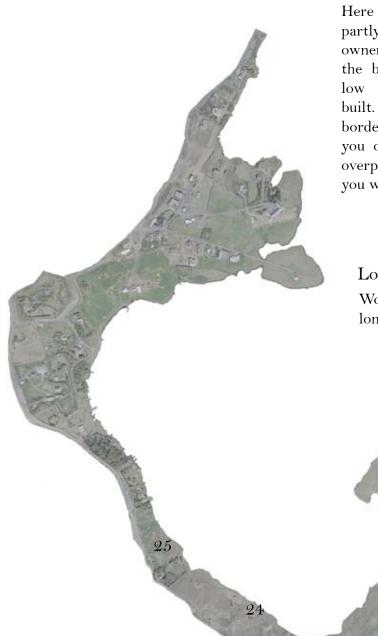
A towering summerhouse creates a feeling of being watched. The distance from the fence is a few meters and a welcome change from all the others. But an old green boathouse soon forces you right up to another fence.











Here the fence has been partly removed but the owner wanted to keep the borders so a very low "wall" has been built. It does create a border without keeping you out, but it has an overpowering effect on you which is surprising.





#### Location 25

Worn down buildings that should have been removed a long time ago.









The most obvious historical path within the whole project area lies along the shore on this side of the lake. They are a pleasant reminder of all the people and horses that have past through here throughout the ages.

Walking along the lake, away from every-body and everything surrounded by Ice-landic nature makes the eastern part of the project area the most enjoyable part. A place to relax, have fun, or go wherever your mind takes you. A chance to forget that the city and all that it stands for is just a short hike away. It's close, and yet so far away.

#### Discussion

Elliðavatn was a lot less open then I remembered. Visiting it was rather disappointing as I expected it to be a more pleasant place and more open to the public. The accessibility analysis was done in March and therefore the weather and vegetation was not at its best, and that probably influenced my experience. However I feel like the area lacks vision. This is without a doubt caused by the fact that the land is not owned by the municipality, has many different functions and no planning has been done on it since the neighbouring districts were planned and built. This has also led to it becoming so difficult to change.

Buying houses, terminating leases or not renewing them when they run out would be my recommendation to the municipality so the area can undergo a makeover and start serving as the recreational paradise it could be.

Removing as many fences as possible would give the area an immediate facelift and make it feel more welcoming. The current status on many summerhouses, boathouses and lands are run down and need to be removed or cleaned up. Broken windows and barbwire compose a risk for curious children who want to play in or near them.

The regional protection should be respected and no more buildings should be built. Roads and paths should be completed to try to give the area a better and cleaner feel. Any obstructions to the public's ability to walk along the shoreline should be removed.

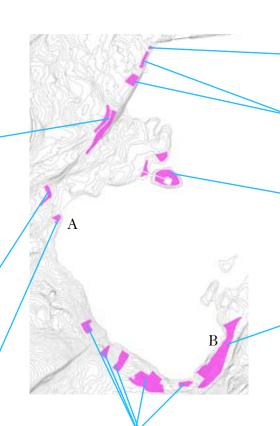
Paths should lay into the area, along the roads. A path could also go along the shoreline as that would draw the people to the lake and away from the horse trails and roads. If the summerhouses to the south will be removed, it would be possible to connect the second proposal area to an education path or education/play stations throughout the landscape, while letting the natural environment around these stations stay natural.

By removing all the roads, paths and trails from the accessibility analysis, as well as all areas that are too steep, we are left with these possible locations for rest stops. Taking all the conditions from the analysis into consideration, we are left with the conclusion that there are five possible locations, there of four that would suit as a rest area. I chose to examine two of them closer at this occasion, with a simple illustration as to how the areas could look like.

A large area that has tremendous potential in uniting the districts, as well as offering a great view over the lake. the drawback is the steepness down to the lake. It could however be designed and made to function without the water connection. Could cause disturbances.

An in-between area next to a trail. Doesn't offer much in terms of view, excitement or connection to water. Not likely to cause disturbances.

Connected to water, an unused area that offers recluse whilst having a chance to stay connected to a path around the lake. Could cause disturbances.



Ownership not clear. Proximity to near summerhouses draws from the feeling of being away from the city.

Currently serving but not functioning as a meeting place.

A possible but not exciting location for a rest area. The steepness in the hill draws from it's attraction. Could disturp neighbours.

The summerhouse towers over the peninsula making this an awkward location for a rest area. It would be an inconvenience for the owner to build a rest stop here. The biggest possibility for using this area is if the house is bought and operated by the municipality.

A large open area, with well connected trail leading by. The elevation is not too steep, view is great and it has the possibility of connecting it to a bigger network of recreational options. Far away from houses and should therefore not cause disturbances.

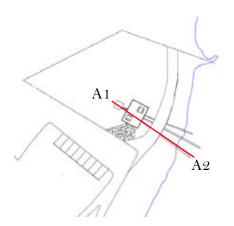
Elliðavatn







A rest stop. The idea is to take an unused area and turn it into cozy area where you can sit down on a bench, enjoy the view, the silence, the sun or the shelter. An area where children are free to play on the rocks and the walls. The current hill will be moved a bit to create a hidden play area. New trees will be planted as well as bushes, whilst leaving plenty of space in between for hide and seek, climbing or a picnic. All stones will be natural rocks.

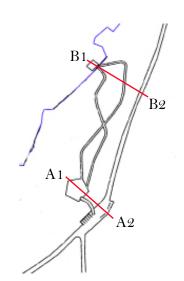




Elliðavatn

A rest area, a view point, a meeting place and a hindrance track for children. Whether you are walking, driving or riding a horse, the area is open to all. One path is normal wooden path that leads you down to the lake. The other, and obstacle track for children of all ages. All material is kept as natural as possible. The paths meat by the lakeshore where it is possible to reach into the lake and hopefully see some fishes. The vegetation changes from coniferous trees up in the hill, to birches in the middle of the hill, and to bushes at the bottom of the hill. This is to create shelter without compromising the view.

















Elliðavatn

# Sections















Picture 7

Picture 8

Picture 9

Picture 10

Picture 11

# Building on waterfronts - Case Study

# Porsteinsvík

Porsteinsvík is located next to lake Pingvallavatn and belongs to the Grímsnes- and Grafningshreppur municipality.

#### Contract of ownership

Reykjavík Energy became the owner of Nesjavellir in 1965. The total size of the area is 2740 ha. Within this are the summerhouses in Porsteinsvík, which had renewed their leases right before the land was sold. Most of the leases were made for 50 years and are valid to 2013-2014, but 3 are for 99 years or to 2063-64 (Gíslason, G. & Loftsson, Y.P. 1997:19).

#### Land use plan, 1997

In 1997, Reykjavík Energy and the municipality of Reykjavík made a planning project for all the areas owned by them in Grafningshreppur. The main goal was to connect and coordinate the use of these areas for energy production and recreation, concentrating on planting, constructions and planning.

The report refers to the situation at the time, that this is a recreational area and that there are privately owned summerhouses, whose owners lease the land. The authors acknowledge the possibility that this area might be seen as an important recreational area in the future and suggest that the company will claim any land that might become available.

The attraction of the area, and it's opportunities for tourism and recreational values are stated, as well as the importance of documenting and protecting historical remains.

#### Master plan for Grímsnes- and Grafningshreppur municipality 2002 - 2014

The master plan for Grímsnes- and Grafningshreppur for the years 2002 - 2014 was verified in 2003. Master plans are made for municipalities and are valid for at least 12 years at a time. There the municipality has to verify future aims in land use, settlement development, transportations, environmental issues etc (Skipulagsstofnun n.d.).

A revision was made in 2008, where a draft was made to include a more environmentally friendly vision and aims for the municipality, as well as new laws that were relevant. It is named the master plan for Grímsnes- and Grafningshreppur 2008-2020, revision of the master plan for 2002-2014. As the revision is a draft and did not impose any changes to the project area in Þorsteinsvík, all references will be to the 2002 – 2014 master plan.

The land use plan (1997) was used as a reference for the master plan and they are therefore in coherence, stating that all areas owned by Reykjavík Energy are defined in the same way, as open areas for specific uses, for recreation. Areas with protection value are protected under a regional protection. Within the municipality are over 2000 summerhouses and up to 6000 more expected to rise in the foreseeable future (Grímsnes- og Grafningshreppur 2003:30). The municipality wants bicycle and hiking paths in these areas to connect the municipality within, as well as to connect summerhouses with recreational areas and tourism sites.

The aims of the municipality mentioned in the revision are for

the protection of major natural phenomenon whilst allowing the public to enjoy these valuables. The project area is defined as an uninhabited area and off-season habitation in the master plan.



Picture 12

#### Recreational policy (2010)

Currently ongoing, the recreational policy is a continuation of the land use plan from 1997 but looking solely at the recreational aspect. As there are many areas owned by Reykjavík Energy that are important to protect either for natural or historical reasons, the company is to form a more extended policy regarding nature and remains within these sites. The completed version of this report is due out this year (2010), but all references will be to a draft version obtained by the author in February 2010.

Further information regarding tourism and recreation in the

area can be found in this report, as well as suggestions on how the company can work more with the landscape when it comes to constructions and maintenance.

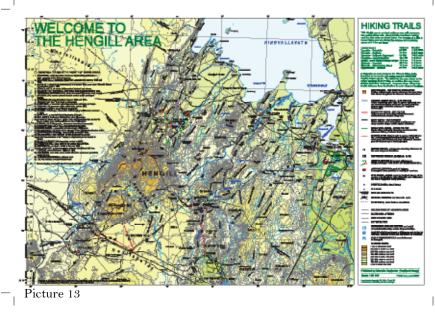
#### Relics in Nesjavellir and Ölfusvatn, 1997

Two locations are listed that are relevant to the project area. One is a lava fissure which marks the property lines between the project area and the farmland Nesjar. The other is the hill Skógarhóll which is believed to be the home of elves.

#### Marked hiking trails, 2007

A varied nature in the Hengill area gives numerous recreational opportunities. To make the area accessible Reykjavík Energy has been marking hiking tails since 1991 (Gíslason, G. & Loftsson, Y.Þ. 1997:26). Some of these hiking trails date back centuries and are known as þjóðleið in Icelandic and refer to trails created by walking or horse back riding, which formed a trail in the landscape and functioned as a road. These trails are a part of Icelandic legacy and are important to protect and maintain. Many of these trails have been lost throughout the country, whilst others maintain their role and guide hikers along their way. One such trail leads past the project area in Porsteinsvík.

The marked trails that can be found within the land of Reyk-javík Energy are a part of an extended network of hiking trails in the Hengill area (as can be seen in picture 1. Hengill is a mountainous area between Highway 1 (road) and Pingvallavatn from Mosfellsheiði (heath) east to Grafningsfjöll (mountains).



#### **Discussion**

Owned by Reykjavík Energy, the area is seen as an important recreational area for the future, whilst also being clouded by great uncertainty regarding the company's future vision for it.

Thanks to extensive analytical work, creation and maintenance of forested areas in the surrounding areas throughout the years, connecting the project area to it's surroundings and opening it up to the public is possible.





#### **Natural Factors**

#### Vegetation

The area is very varied in vegetation. The majority is the moss Rhacomitrium lanuginosum, a pioneer species, which covers the lava. The moss spread is very sensitive and can take decades to grow back if disturbed. In a few, small places are marsh areas, while the hill Skógarhóll is covered in shrubs. More shrubbery is present near and around the summerhouses as well as very rich heath areas. The shrubbery consists of birch (Betula pubescens). The natural birch is very contorted and low grown. Other common plants include: Empetrum nigrum, Vaccinium ulginosum, Festuca vivipara, Salix callicarpaea, Thymus praecox and Potentilla crantzii to name but a few. In the surrounding areas are very varied and rugged vegetation giving rise to recreational possibilities (Gíslason & Loftsson 1997).



Picture 14

#### Geology

The soil is a volcanic soil, which is very fertile due to its great ability to bind organic matter. (Jónasson & Hersteinsson 2002) The bedrock is mostly hyaloclastite and tuffecous sediment formed under glacier in during Pleistocene times (Engilberts-dóttir 2008). Ridges formed by hyaloclastite run from Hengill and into the lake. The ridges along with tectonic fractures and lava shape the landscape. There are 3 volcanic systems in the Hengill area and the last eruption that took place there was some 2.000 years ago (Gíslason & Loftsson 1997).



Picture 15



Picture 16

#### **Natural Factors**

#### Animals

Wild mammals in the area are foxes (Vulpes lagopus), minks (Mustela vison) and field mice (Apodemus sylvaticus). Over 50 species of nesting birds are known in the greater Pingvallavatn area. The most common are Rock Ptarmigan (Lagopus muta), Golden Plover (Pluvialis apricaria), Snipe (Gallinago gallinago), Redshank (Tringa totanus) and Meadow Pipit (Anthusn pratensis) (Gíslason & Loftsson 1997).

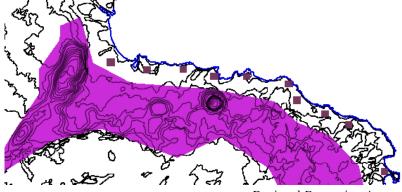
Only three species of fish exist in the lake, Brown trout (Salmo trutta), stickleback (Gasterosteus aculeatus) and Charr (Salvelinus alpinus). What is special about the charr is that this is the only lake in the world where there are four variations of it (Gíslason & Loftsson 1997).

#### **Protection**

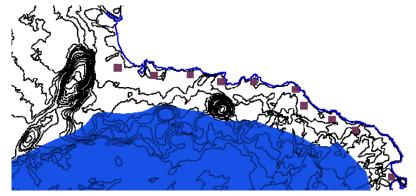
The main source of water uptake for the geothermal plant is from a hole by the crater Grámel. Nesjahraun (the lava)is categorized as a near region of that water hole in category II.

The hill skógarhóll and the pseudo crater Eldborg along with Grámelur are under regional protection. These areas form beautiful volcanic remnants surrounded by shrubbery and moss covered lava and aesteticly shaped volcanic craters (Grímsnes- og Grafningshreppur 2003)

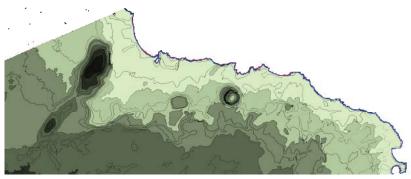
Two locations containing relics are within the project area (Vésteinsson 1997).



Regional Protection Area



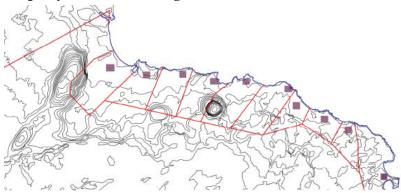
Water Protection Area



**Spatial Conditions** 

#### **Cultural Factors**

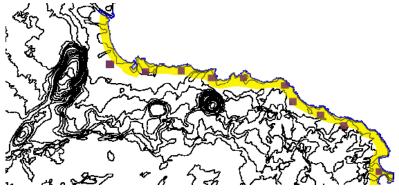
**Property lines & Buildings** 



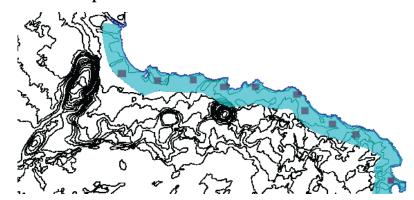
Roads, Paths, Trails & Buildings



50 meter protection buffer



100 meter protection buffer



#### **SWOT Analysis**

Among the area's strengths is the beautiful nature, the fact that it is largely undisturbed and protected as well as the fact that there are few buildings and structures in the vicinity. The fact that the majority of the area is protected can also be seen as a weakness. If the area is to largely protected it can be difficult to develop the area, should that be desired.

The area's biggest opportunity is in the recreational aspect, while its biggest threat is the current drainage issue.

#### **Need and Problem definition**

The summerhouses as they are so close to the lake that hikers feel like they are trespassing if they walk along the lake shore.

The land that is leased to the summerhouse owners is much larger than is customary to have today. A standard summerhouse land is between 1/2 to 2 hectares. A pseudo crater, which is protected by Icelandic law, is located within 2 of these lands thereby raising questions about the public's right to visit this landmark.

The uncertainty about the future vision for this area, as the leases will start running out in 2013.

Numerous laws and regulations put limitations to the development of the area, as well as the vegetation and lava rocks. They create a stunning landscape, but also a landscape that is sensitive to disturbance.

Apart from summerhouse owners and their guests, other visitors include hikers and Reykjavík Energy employees that go there to fish, but at present there are no facilities for them.

#### Aims & strategies

Protect the sensitive nature

Look into opening the area for the public

Make a strategy plan discussing possible scenarios, relating to leases and accessibility

# Accessibility & Visual Analysis

Accessible Not Accessible

Whether areas were accessible or not was determined by the following factors;

Am I physically capable of entering the area?

Can I walk on the path?
Can I drive on the road?
Can I ride on the horse trail?
Can I cross the lava?

Are there hindrances or is something physically blocking my way?

Am I uncomfortable going through the area or close to it?

The purple boxes indicate the location of the summerhouses along with a slight buffer area that represents the minimal distance from the houses that hikers would find comfortable passing.

#### Location 1

The house on this land is owned by Reykjavík Energy and is called Riðvík. A beautiful and secluded area. This is the only land that is fenced off and closed by a gate. The land is 69.000 m² and houses a summerhouse and boathouse.









# Location 2

The land is 23.000 m<sup>2</sup> and houses a summerhouse and boathouse.











#### Location 3

In many places, it is clear that the owners have done a great job at making the structures blend in with the landscape. The house on this land stands out because of this and does indeed look like it belongs there. Almost like a part of the landscape. The land houses a summerhouse and a bridge. It is 22.100 m<sup>2</sup>.















#### Location 4

The owners have tried to create a watm parking area by planting birches. Unfortunately they planted them in a straight line which feels totally out of place and character. The land is 50.000 m² and houses a summerhouse, a boathouse and a pier.

Between location 3 and 4 is another land, which is 24.600 m<sup>2</sup> and houses a summerhouse and a boathouse.













This land is 50.000 m2 and houses a summerhouse and a boathouse. Within this property is majority of the pseudocrater. There is also a rather large wetland here that greatly increases the project areas biodiversity.









#### Location 6

A terrible eyesore can be found on this land. A box shaped area has been flattened and is now covered in dandelions (Taraxacum officinale) and grass. This catastrophe is in the worst possible location, right under the pseudo crater and next to the road. A protected, natural element impaired visually by the presence of this site. Hopefully this will be left untouched for the foreseeable future so nature can try to reclaim it. The land is 40.000 m<sup>2</sup> and houses a summerhouse and a boathouse.

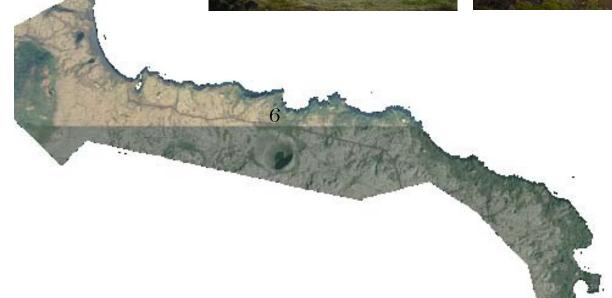












#### Location 7

This land is 40.000 m<sup>2</sup> and houses a summerhouse and a boathouse. The landscape takes some changes here as trees have not been planted here.









#### Location 8

This land is 40.000 m<sup>2</sup> and houses a summerhouse. Another land with few birches. The lava in the south comes quite close to the shore.

















## **Porsteinsvík**

## Location 9

This land is 64.000 m<sup>2</sup> and houses a summerhouse. A very large land and varied in vegetation. The lakeshore is covered in pebbles that is hard to drive on. The beach is divided in 2 with people fishing often entering this part of the beach as the boundaries are not clear.

















# Porsteinsvík

## Location 10

The rest of the project area is defined as open area and is open to the public. The landscape here is breathtaking. Employees of Reykjavík Energy can come here to fish but the company is considering offering the public the chance.













# Þorsteinsvík

Location 11

Nearing the boundaries. the project area ends in











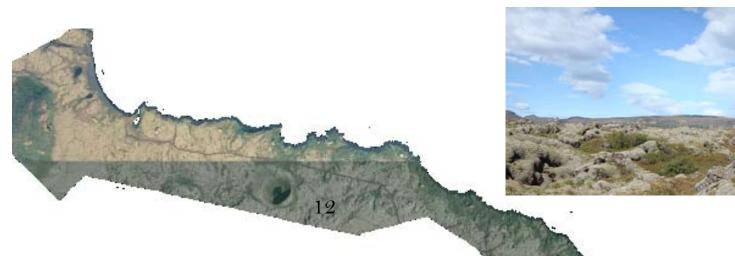
## Location 12

The hiking path. An old þjóðleið which has served many onhorse or foot, for hundreds of years.











# Location 13

Damage to the moss covering the pseudo crater is a harsh reminder of nature's vulnerability towards man as an all terrain vehicle has been driven up and down the crater.









# Accessibility & Visual Analysis

### Porsteinsvík

#### Discussion

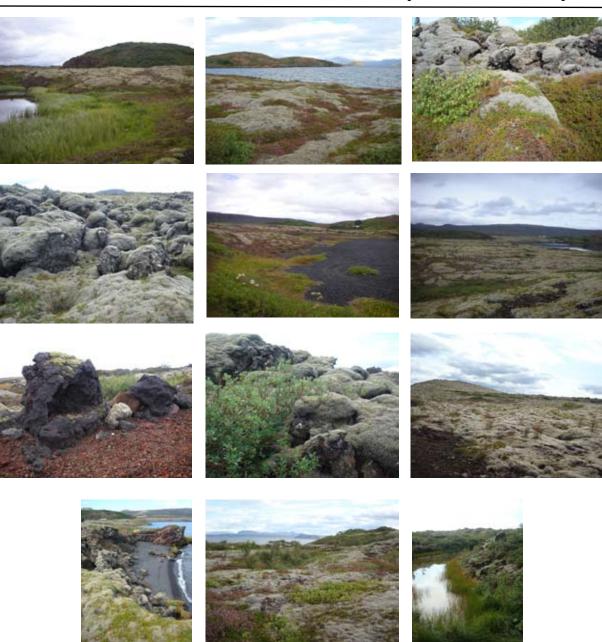
The project area is quite open, but its boundaries provide limitations. It is quite reclusive and very few people would think of driving up there. It wasn't that long ago when the only way to access the area was by boat. Today it is possible to enter the area in 2 locations by car. The road coming from the south is closed by a locked gate and is therefore no accessible for the public. To the west is another road that is closed by an unlocked gate, but drivers must drive through privately owned farmland to get to the gate.

The lava that runs through the area makes access difficult, as it is very rugged and dangerous with gaps and faults hiding under the moss. Therefore it is vital to follow the marked path or road. The Northern part of area is relatively flat and easier to navigate then the South part. Occasional steep areas by the lake shore and within the crater make walking hard but provide excellent view points.

The vegetation near the lake is quite dense. The crooked birch forms a low mass that can be difficult to get through. Small openings and varied vegetation make it possible to walk through and highly enjoyable.

Despite the difficulty some areas present regarding being able to walk by the shore line, it is those difficult elements that create such a stunning landscape and are the sites main attractions. But you don't know that until you've seen them.

The area's beauty is almost indescribable, the varied and native vegetation along with the lavas unruly features create a visual wonderland that can uplift your spirit on even the darkest days. An enriching experience is sure to follow a hike through the area.

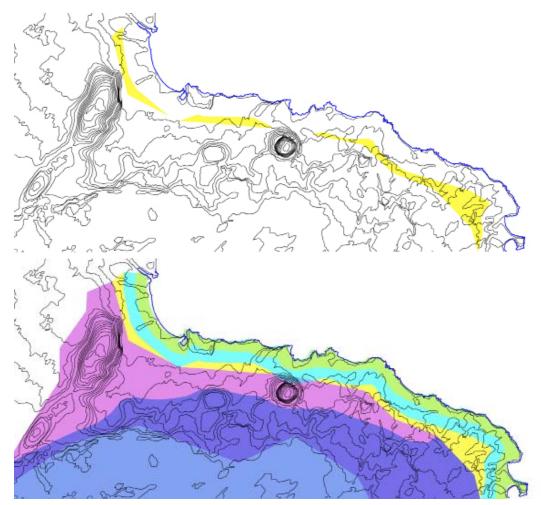


Proposal

As previously mentioned, the area is very protected. Pingvallavatn is the only lake in Iceland with a 100 meter protection zone. The regional and water protection covering a large portion of the area as well. The result is that only a small part (yellow) can be built on without any need for special permission. Even though it is possible to ask for an exception, I believe the company should seek to work within the available space.

Looking at the available areas and the analysis, a small area close to the lake caught my eye. It is relatively flat, it is close to the lake, close to Skógarhóll, a road and a path. It is far away from all the summerhouses so if the leases will be renewed, a rest area here should not interrupt them. If the area will be developed further, this location is well connected and expandable.

For the near future, a rest area in this location could be beneficial for hikers, those who want to enjoy the beautiful and quiet nature and those who come to fish.

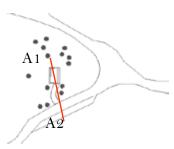




Proposal

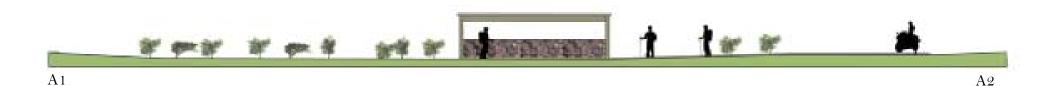
A site like this a rest area that can blend in with the land-scape. After choosing the location it became apparent to make the rest area as neutral as possible. In the area where I have put the trees (birches) is a rather shallow fault so the trees and the structure would not be fully visible from a far. The structure would consist of walls built from lava, wooden beams, from untreated wood, and heath vegetation on top of the roof. With a path made from cut lava, the structure will fit in with the surroundings and provide a comfortable area to sit down and enjoy the view or take shelter from the wind.

A parking area can be made across from the structure. It will be made with the same type of gravel as is in the roads so it doesn't become too obvious.









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#### **Strategies**

Porsteinsvík is without a doubt one of my favourite places in the world. I had never heard of it before this project but now I can't wait to go back. Opening up the area for the public is a great idea but how to go about it has not been clear to the company. It is important that a decision be made that marks a policy that can be enforced. With the first leases opening up in 2013 a decision needs to be made fast as to whether to extend them or not.

If the leases will not be renewed exciting options open up, and the areas attraction can become even greater. It would be possible and advisable to keep the current roads leading to the summerhouses as they could serve as parking areas for individuals or groups, who could have a relaxing day by the lake without much distraction from others.

Paths could also be laid or a clearing in the vegetation be made that would encourage people to walk through and thereby creating a new path. The paths could connect to the current hiking trail and also guide people along the lake.

The area's lava and vegetation should be kept as untouched as possible to keep the beauty and characteristics in tact. Due to that fact and the various protections that are active in the area, one possibility for opening up the area or expanding would be to the west of Skógarhóll. There was no study done on that area for this thesis but if Reykjavík Energy wishes to increase accessibility and recreational possibilities that could be worth looking into.

Opening up the area raises the question of whether the locked gate should be removed. Keeping it locked means more security for the summerhouse owners but fewer options for driving visitors. That could however also be an appeal for hikers who wish to experience the peaceful nature.

There are many things to consider and hopefully the company will mark a course for the area soon so decisions can be made. It is possible to renew the leases and open up the area, but it would probably result in a minimal effort that would not make any significant changes to the area.





Looking at public access to lakeshores in Iceland is not a simple task, and it is important to look at each situation separately as the conditions can vary so greatly from one place to another.

Little has been written on the subject and landowners and the public are not well-informed about their rights.

Municipalities and landowners were not fulfilling their obligations to allow and facilitate access to the study areas. From that I can only assume that the current status of public access to other lakes in Iceland is in very similar state of being inaccessible.

The laws and regulations need to be made to serve the interest of the public more than they do today.

A closer look must be made to the definition of areas in planning, as not having them correctly defined can result in legal complications and uncertainty.

Making a policy/deciding on a vision for such large areas within municipalities and companies can save them time, money and negative publicity.

With our wellbeing in mind, we should learn about our rights and learn about our environment.

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### Map data

Loftmyndir ehf.

Reykjavík Energy GIS database

Kópavogur municipality GIS database

#### Lectures

Lerman, Peggy. Legislation and practice. Lecture held in SLU, Alnarp, November 30, 2009)

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