LAKE NÄSIJÄRVI

Section 1

Regenera Water Sports Pilot Site Vulnerability Assessment

Pilot Site	Focus on Lake Näsijärvi, also Tammerkoski Rapids and Lake Pyhäjärvi area
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This Vulnerability Assessment is a tool for informing adaptation, planning and enabling resource managers to evaluate the impacts of water sports on a water body. This assessment is designed to support sound decision-making by identifying which ecosystems or species are significantly affected by current and proposed activities. This assessment will help understand why an ecosystem or species may be vulnerable. Vulnerability has three principal components: sensitivity, exposure, and adaptive capacity.

Consider the following while conducting your assessment:

- Screening – do you feel that an ecological study may be necessary?
- Scoping - which impacts in the blue space need to be assessed?
- Baseline study – has a baseline study of the geographic, biological, socio-economic and cultural context already been conducted?
- Impact prediction - what are possible impacts, positive and negative of conducting this analysis, if any?
- Mitigation - how can these negative impacts be mitigated?

Objectives of Vulnerability Assessment:

5. To evaluate the potential vulnerabilities and impacts of water sports and other human activities on blue spaces within the RegeneraWater Sport framework.

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6. Evaluate exposure to known vulnerabilities and assign severity levels to those vulnerabilities. Recommend remediation or mitigation if and whenever needed.

Scope of Vulnerability Assessment:

To include activities such as boating (sailing, rowing etc), swimming, fishing, jet skis, hiking and walking trails within blue spacesand surrounds.

Goal of vulnerability assessment:

Is to provide the necessaryknowledge to partners and stakeholders within the Regenera project to take appropriate actions against threats to the case study blue space environments.

Biosecurity

Invasive, non-native flora and fauna can have damaging effects on ecosystems of blue spaces. Anyone using waterways can inadvertently spread species from one water body to another.

Please note following while conducting your assessment;

Check - all clothing and equipment thoroughly for any visible material (mud, leaves, animal matter). Closely inspect seams/seals on waders and boots.

Clean - hose down or pressure wash all equipment on site. If there are no facilities, carefully bag all equipment until such facilities are available. Washings must be left on site or disposed of carefully. Do not allow washings to enter other watercourses.

Dry - Hang boots, nets etc in an airy space as air drying is the best method of disinfection. Some non-natives can survive up to 2 weeks on damp surfaces and 2 days on dry surfaces. Ensure items have been drying for 48 hours before using them on the next water way.

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1.0 Site Description

1.1 Lake name

Lake Näsijärvi (main focus)

1.2 Location

Details	Map (Embed Image)

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Located at Pirkanmaa, the city of Tampere is located by the lake. Tampere is a town ETRS-TM35FIN: N 6843525, W 327266 61°34 N 023°46 E	

2.2 Size and Depth

Large	Medium	Small
2 ha or greater	0.5-2 ha	Under 0.2 ha
More than 30m depth	max 30 m depth	Lessthan 6m depth

Size 256 km^2=25600 ha

Depth

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Max depth 63 m, mean depth 14,1

2.3 Surrounding environment - flora, fauna, and geographical features

A field study was not conducted specifically related to this assessment, but comprehensive data has been collected from other sources and basing on the field studies already done in the pilot site area. There is a lot of data about the lake's species and ecological status, consisting of information obtained from the authorities and various reports made by different organizations. In general, the value of the lake is high due to its good water quality. Lake Näsijärvi is a very diverse environment, so not all species are not listed here. The lake's fish and other aquatic species are very diverse and several valuable fish species occurs, including lake trout, lake salmon and vendace. There are also several valuable aquatic plant species (e.g. *Persicaria foliosa, Callitriche hamulata, Scolochloa festucacea*). Several species of EU:s Habitats Directive and its Annexes also exists (e.g. moor frog, otter, *Persicaria foliosa).*

There are several aquatic invasive species present (e.g. *Glyceria maxima, Elodea canadensis),* but their occurrence is still scarce and not causing problems yet.

Which describes the land best next to the water body table?

	Present	Moderate	Abundant
Bog/Moorland	x		x
Forest	x		x
Grassland			
Crops-tillage/	x	x	

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other			
Urban	x	x	
Other (describe)			

A field study was not conducted specifically related to this assessment, but comprehensive data has been collected from other sources and basing on the field studies already done in the pilot site area. There is a lot of data about the lake's species so not all species are not listed here. The lake's fish and other aquatic species are very diverse and several valuable fish species occurs, including lake trout, lake salmon and vendace. Aquatic invertebrate data is very diverse and the is comprehensive as monitoring has been done for several years in different parts of the lake, and their ecological status is good expressing a diverse community. Because the lake area is large, there are huge amount of different bird species too, which occurs in the lake area and on the shore.
Several species of EU:s Habitats Directive and its Annexes also exists (e.g. moor frog, otter, different dragonflies). Because most of the shore areas are forested, there are many mammal species including elk, fox etc. which are very typical of the region.

There are several both aquatic and land-based invasive species present (e.g. *Pacifastacus leniusculus, Mustela vison, Nyctereutes procyonoides*).

Riparian Zone Survey	Evaluate shoreline's vegetation in water protection
Aquatic plant survey	Assess aquatic plant types and abundance.

1.4.3. Is shoreline vegetation abundant yes / no (circle most applicable)

1.4.4. Are aquatic plant types abundant yes / no (circle most applicable)

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Yes

1.4.5

There are several ridge areas, including important groundwater areas (e.g. Pyynikinharju, Pispalanharju, Epilänharju). Paarlahti bay area is area of interest due to an interesting narrow fjord-like bay, which is stated to be the longest inland fjord in Nordic countries.

1.4.6 Water Quality

Lake Näsijärvi water quality is good. According to the European Water Framework Directive's and assessed by its methods, the ecological status of Näsijärvi is good. There are no significant amounts of pollution or bacteria. Water is also used to water supply.

1.4.7 Local Human population

Tampere, Ylöjärvi.

1.4.8. List Designated Sites

Site Code	Site Name	Approx. Distance (km)
FI0356003	Valkeekivenlahti	37 m
FI0345003	Nuorajärvi	500 m

2.0 Identify Vulnerabilities

2.1 Identify Vulnerabilities Table

Risk Score 1-5
5 being the highest risk and 1 being the lowest

Ecological impact	Species	Hazard	What will be harmed	Control measure	Risk score

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Species sensitivity-Flora	E.g. Callitriche hamulata, Persicaria foliosa, Scholocoa festucea All the bottom-leaved plants which require good water quality.	Loss of species if they detach from the bottom due to dredging or pier construction for example.	Biodiversity	Surveys before construction and accurate planning, not to build sites where valuable species exists.	2
Species sensitivity-Fauna	Practically all birds, fish, aquatic invertebrates' communities	The activity can cause disturbance to different species and for example the fish may be chased away	Nesting sites, community composition	Maintain safe distances from nesting sites, limiting the activity to, for example, nesting time	3
Habitat Disruption	Species which need specific habitats and are valuable, e.g. Persicaria foliosa	- --removal of vegetation for development or recreation	Ecosystems	Education of participants. Preserve natural vegetation, create protected areas follow local guidelines for building	3
Physical Habitat damage	Some fish species	Anchoring, docking, launching	Shoreline, reed beds	Education	1

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Noise pollution	Some fish species and bird	Motorboats, Jetskis, snow mobile	Breeding grounds.	Education Quiet times	2
Collision risk	In principle all bird species, but not very typical problem in Finland	Participants colliding with bird	fauna, protected areas	Educate participants, slow down in sensitive areas, buffer zones	1
Invasive species spread	Glyceria maxima, Elodea canadensis	Spread of seed, plant & animal material	Native species & ecosystems	Clean boats & all equipment thoroughly.	3
Chemical Pollution	All species, affected by changes in water quality	Fuel spills,	Flora Fauna Biodiversity	Correct fuel handling, eco-safe products,	1
Sedimentation	Fish spawning areas	Increased sediment from erosion, construction, and land use changes	Aquatic life	Implement erosion control measures, limit construction near shoreline	1
Water pollution	All species, affected by changes in water quality	Not a risk from recreation, but accidents possible.	Ecosystems	use eco-friendly boating practices,	1

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Fishing Pressures	Especially salmonid fish	Overfishing,	Disruption of aquatic food systems, disturbance of breeding sites	Implement no fishing zones, Catch and release practice, catch limits	2
Aesthetic and recreational pressure	All aquatic species	Pollution, habitat destruction due to trampling etc,	Natural beauty of lake, vulnerable flora & Fauna	Follow all LNT guidelines	2
Climate change exacerbation	Impacts on everything, water levels, water quality	Boat emission contributions	Water temp. & levels	Follow all guidelines	1

2.2 Environmental vulnerability

Biodiversity

Lake Näsijärvi has a high value due to its good water quality and a very diverse environment. The lake's fish and other aquatic species are very diverse and several valuable fish species occurs. Siilinkari at Näsiselkä, is recognized as a valuable bird nesting spot.

Some protected species that occur at the lake are:
Cape frog (*Rana arvalis*)
Osprey (*Pandion haliaetus*)

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Invasive species

Glyceria maxima, Elodea canadensi (both are easily spread)
Invasive crayfish
Planted rainbow trout
Sun perch

We have regulations concerning invasive species. We also have removal projects of invasive species. There is some kind of control of invasive species (invasive species coordinator in Tampere).

Erosion

Not a big risk at Näsijärvi, natural waves and small waves from boats

Water quality

1. No recreational activity is seen as a risk to lake bottom
2. Spreading of Glyceira maxima trough seeds, via shoes and boats. Spreading of jelly moss by birds and via fishing gear.
3. Leaks are possible, not seen as a big risk in a big lake like Näsijärvi. Cleaning of boats, but not sure about the chemicals nowadays.

Chemical Analysis.

The water quality in Näsijärvi varies, especially in the southwestern part, due to industrial wastes and sewage causing pollution and eutrophication. However, the water is treated to ensure it is safe for household use.
Industrial pollution has historically affected the lake, with certain areas showing higher levels of pollutants. Nowadays water quality is quite good all-around Näsijärvi. Approximately two-thirds of the water for household use in Tampere comes from surface water sources, including Näsijärvi (Kaupinoja water intake plant). The water is treated to ensure it is hygienic and safe for consumption. Tampereen Vesi monitors very thoroughly the water for household purpose.
Näsijärvi is also monitored severely in a joint monitoring called Tampereen seudun yhteistarkkailu. The monitoring includes monitoring of harmful substances in water, fish, clams and sediment.

Water Use

Some cleaning water is taken from Ratina backwater.

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the water is used for water supply from Kaupinoja water intake plant for the whole city

2.3 Human Impact

Erosion

Locally close to population settlement there are indications of erosion of the terrain, for example Kauppi rock areas

Occurrence of Litter table

	None	Present	Moderate	Abundant
Litter in the water			x	
Litter in the vicinity			x	

Infrastructure present and planned

1. Yes, there is a lot of infrastructure by the lake 2. Not a problem here? 3. Yes, a lot of new plans in infrastructure and building the shoreline

Carbon Footprint

The biodiversity footprint of the City of Tampere in 2021 was 557 nPDF (potentially disappeared fraction of species globally) and the carbon footprint 207 763 t CO_2e. Food products caused 22 % of the biodiversity footprint. Red meat, dairy products, and poultry caused the largest biodiversity footprints within food products. Other major causes for the biodiversity footprint were heat consumption (13 %) and construction (12 %). In terms of the carbon footprint, heat consumption was the largest contributor and caused 22 % of the carbon footprint. Especially the use of peat in heat production increased the carbon footprint. The second largest carbon footprint came from the consumption of food products (14 %) and construction (13 %). The biodiversity footprint of the material consumption of street renovation was calculated as well. The carbon and biodiversity footprints of street renovation

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were compared between traditional street renovation and renovation that followed the principles of circular economy. Street renovation that followed the principles of circular economy caused 40 % smaller biodiversity footprints and 35 % smaller carbon footprints than traditional renovation. Scenarioson how the City of Tampere could reduce its carbon and biodiversity footprints were also calculated. Scenarios included for example implementing the principles of circular economy in construction, reducing energy consumption, and replacing meat and dairy products with plant-based products. The method used in the report assessesthe global extinction risk caused to different speciesunder one unit of measurement, similar to a carbon footprint. This makes it possible to compare the biodiversity footprints of different organizations and international supply chains. In the future, cities and regions around the world can utilize the presented assessmentto develop and implement measurable strategies towards net zero emissions and nature positive impacts (Study: *TAMPEREENKAUPUNGIN HIILI- JALUONTOJALANJÄLKIby Krista Pokkinen, Janne S. Kotiaho, Emmi Nieminen, Laura Ollikainen, Maiju Peura, EssiPykäläinen, Väinö Savolainen, Silja Tuunanen, Veera Vainio & Sami El Geneidy, University of Jyväskylä)*

Also, From 2023 tourism income to Tampere was 579 million, 86% of visitors are domestic, average length of stay varies by type of accommodation and of course by country of origin with an average of 2 nights.

2.4 Socio-economic considerations

Lake Näsijärvi area is a very popular year-around water sports destination, both locally and regarding tourism activities. Finland is also internationally known for its Saunas and Tampere is the “Sauna capital” of the world. One very popular activity is the year-around public sauna culture involving either open water swimming or ice/winter swimming. Sailing is also a very popular sport activity on Lake Näsijärvi as it is a big lake and has also good wind conditions. Canoeing and SUP-boarding are also present, but maybe because of wind-based reasons they are maybe more popular on the neighbouring and more sheltered Lake Pyhäjärvi. During wintertime Lake Näsijärvi is frozen for 3-5 months depending on the winter conditions. During wintertime it is very popular to skate, ski and Nordic Walk on the frozen lake. There are skiing and skating routes made and upkept on the lake for locals and tourists to use. Fishing is also a very popular year around activity, from the piers and using fishing boats during summer and “hole in the” ice fishing.

Lake Näsijärvi has been the highway and backbone of industry, culture and mobility for people historically. Tampere has born on the shores of the Lake and its rapids because of textile industry that has needed a lot of ingredients and raw material like

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wood. The logs have been transferred via the lake back in the days and the pictures of that are an iconic picture of the city and the lake. Also, lake has provided fish and recreation for the local people for generations. Sauna culture is a significant old way of enjoying life and staying healthy, and it usually includes the vicinity of a lake where to go swimming after the sauna. Also, Lake Näsijärvi has been the "highway" for people from neighbouring villages and rural areas to get to the Tampere City. It also provides drinking water for the residents. So, in many ways, the lake has been and is a significant element for the local people and local history.

Yes, there are a lot of relics and places of archeological interest in the vicinity of the lake and its islands. A site https://muinaismuistot.info/ will provide a map-based perspective into the topic. Maybe the most known archeological site is the Tursiannotko Area, which is actually situated close to the shore of neighboring Lake Pyhäjärvi in Pirkkala. It is a Late Iron Age dwelling site that has been archaeologically excavated since 1999. It's estimated that the area was inhabited at the beginning of the Viking Age. While some individual finds have dated to as early as the 5th century. The remains of 3–5 houses that were dated from Late Iron Age to 13th century have been uncovered.

3.0 Exposure Assessment

3.1 Seasonal variations

There is not much disturbance considered at any time of the year that would be seen to have an impact. But during the summer when recreational activities are at there most, birds can be disturbed by the sound of motorboats and fish are disturbed by fishing. Also paddling can theoretically disturb birds and nesting birds, if a large group appears to the habitat area.

Merely no disturbance can be recognized during the wintertime.

3.2 Consider human activities

Näsijärvi is such a big lake, that none of the activities cause harm. Locally there can be

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harm caused by small things such as piers. Construction related to recreation can cause some disturbance.

3.3 Intensity of water sports

Wintertime: Skiing, skating and walking, sauna and winter swimming during when the lake is frozen. Skiing, skating and walking volume from a few hundred to a few thousand per day in the vicinity of the Tampere city, depending on the weather and weekday. Sauna volume (including swimming) from several hundreds to a few thousand per day in the public saunas (6-7 different saunas) in the vicinity of the Tampere City. Not so dependent on the weather or weekday, popular daily.
Summertime: Sailing, canoeing, swimming, SUP-boarding, fishing, water jet skiing, sauna (also Sauna boats). Sailing, canoeing and SUPboarding from tens to a few hundred dailies (estimation). Water jet skiing in the vicinity of the city from a few to 10 jet ski users per day. Sauna from several hundreds to a few thousand per day in the public saunas (6-7 different saunas) in the vicinity of the Tampere City. Not so dependent on the weather or weekday, popular daily. Sauna boats used daily but volume dependant of the weather. Estimation on average that there are 5-10 sauna boats sailing in the vicinity of the city on the Lake Näsijärvi daily.

3.4 Table for Vulnerability Assessment

Risk 1-5
1-low risk
5 -high risk

Activity	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
Angling	1	1	1	1	1	1	1	1	1	1	1	1
Water sports	1	1	1	1	1	2	2	2	1	1	1	1
Shore-based	1	1	1	1	2	2	2	2	2	1	1	1

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activity walks hikes												

4.0 Sensitivity Assessment

4.1 Ecosystem sensitivity

In consideration of the size and good condition of the lake Näsijärvi, the ecosystem of the lake is not very sensitive or easily affected by water sports, recreation or tourism.

If there are any impacts seen from water sports and other activities, they are very local and not very severe. At the southern areas of the lake (near to Tampere, Ylöjärvi and Kämmenniemi), were there are mostly recreation activities and housing and summer cottage areas, the disturbance of motor vehicles can have some impact on nesting birds.

The fish population is very strong in Näsijärvi and the amount of some species e.g. pikeperch, the population has grown a lot. Overfishing is not seen as a risk in this lake.

Near densely populated areas close to the city, shoreline walking has some impact on vegetation especially at rocky pats and areas.

4.2 Species sensitivity

There is a lot of data about the lake's species and ecological status, consisting of information obtained from the authorities and various reports made by different organizations. In general, the value of the lake is high due to its good water quality. Lake Näsijärvi is a very diverse environment. The lake's fish and other aquatic species are very diverse and several valuable fish species occurs, including lake trout, lake salmon and vendace. There are also several valuable aquatic plant species (e.g. *Persicaria foliosa, Callitriche hamulata, Scolochloa festucacea*). Several species of EU: s Habitats Directive and its Annexes also exists (e.g. moor frog, otter, *Persicaria foliosa).*

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There are several aquatic invasive species present (e.g. *Glyceria maxima, Elodea canadensis),* but their occurrence is still scarce and not causing problems yet.

Due to size, good water quality and ecological status of the lake, the situation considering species is not seen as very sensitive.

4.3 Habitat sensitivity

Due to size, good water quality and ecological status of the lake, the situation considering habitats is not seen as very sensitive.

4.4 Species Sensitivity Table

	Species	High impact	Medium impact	Low impact
Water skiing				x
Fishing				x
Swimming				x
Windsurfing				x
Boating - engine				x
Boating - rowing				x
Paddleboarding				x
Canoeing				x
Cycling				x
Trail Running				x
Road Running				x
Walking				x

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4.5 Habitat Sensitivity Table

	Habitat	High impact	Medium impact	Low impact
Water skiing				x
Fishing				x
Swimming				x
Windsurfing				x
Boating - engine				x
Boating - rowing				x
Paddleboarding				x
Canoeing				x
Cycling				x
Trail Running				x
Road Running				x
Walking				x

4.6 Proposed Future Developments

A huge project of making an artificial island for new residential area on the lake. Building of new harbour area and amusement park development on the shores of Lake Näsijärvi.

4.6.2 Screening Table for Proposed Developments

Screening Questions	Assessment	Risk- high, medium or low

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The size and design of the whole project	Size & scale of development	to ecosystems to water quality
Cumulation with other existing and/or approved projects.	The potential for cumulative effects with other approved projects in the study area	to ecosystems to water quality
The use of natural resources, in particular land, soil, water & biodiversity	Potential effects on biodiversity, water quality, banks	to ecosystems to water quality
Pollution	Is there potential for dust, fuel spills during the construction phase? Carbon emissions will also be associated with the construction phase.	to ecosystems to water quality
Potential of works to impact directly or indirectly on sites designated for nature conservation (NHA/SAC/SPA)	Is this a Natura 2000 site? Where is the closest Natura 2000 site?	Follow local guidelines
The production of waste.	Will there be soil movements off/onsite? Will possible waste from the construction be re-used within the project, recycled or disposed at an authorised waste facility.	to ecosystems to water quality
What is the expected onset, duration, frequency and reversibility of the building?	What is the duration of building works? Will impacts be short or longer term?	Risks to breeding species depending on seasonality of build. Risks to ecosystems & water quality
Will it be difficult to avoid, reduce, repair or compensate for the effects of the development?	What are the adaptive capacities of the blue space	Are guidelines being followed?

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5.0 Summarisation & Utilisation of Findings:

5.1 Adaptive Capacity of the Blue Space

Biodiversity

Is there a diverse range of species which can enhance the resilience of a lake by providing various functions and interactions that support ecosystem stability?

No, not considering this lake.

Water Quality

In Finland we have a nationwide database for water quality (Hertta/Vesla) that is managed by the Finnish Environment Institute.

Connectivity

Lake Näsijärvi is connected to several other waterbodies. The lake drains into Pyhäjärvi through the Tammerkoski rapids in Tampere. Additionally, Näsijärvi has a wide catchment area that includes lakes such as Ruovesi, Kuorevesi, Keurusselkä, Tarjanne, Pihlajavesi, Toisvesi, and Ähtärinjärvi. The connectivity enhances biodiversity and resilience for sure.

Climate Resilience)?

The lake is not very sensitive to changes, but of course in the long run slow changes will/ can occur due to climate change; change of species due to temperature change, changing the whole food chain slowly for many animals.

Management Practices

The environmental of local, national and EU-levelare being followed. Good practices

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in new ways of taking care and regenerate the area are welcome.

Community Engagement

In Finland local communities can be very active in lake management and protection and lot of lake restoration projects are done in cooperation with local communities

5.2 Impacts

Short term impacts

Not seen as very relevant in this lake

Long term impacts

Not seen as very relevant in this lake

5.3 Mitigation

1. The City of Tampere mainly controls invasive alien species in its areas. Weeds are controlled in public streets, parks and nature reserves. Giant balsam, giant buckthorn and comfrey are primarily controlled in nature reserves and other valuable natural sites. The control of groundsel has started on beaches, but other public areas are also targeted. There is also a new inclusive and participatory way for everybody to join in with a new mobile game related to the control of invasive species.

5.4 Non-Technical Summary

The lake ecosystem is in a good ecosystem for the most parts. The construction and development of residential buildings, harbour areas and an artificial island are the biggest single factors and risks for the lake ecology and vulnerability. Also, the events, touristic and recreational usage of the lakes can act as a possibly risk, as the cruise lines are operating with diesel and there is also a substantial amount of motor-powered recreational boating at the lakes. The petrol stations for boats and their

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regulations and also the wastewater from the boats are also considerable things to take into consideration. The events should have a template, concept and certain good-practice guideline in how to operate in the fragile lake ecosystem.

Layman's Report

Guidelines and a best-practice catalogue to the events and organisers of activities and tourism companies. Regulations to the boating, petrol stations and handling of the boat wastewater. Trying to move from diesel cruise lines to options operations with sustainable energy methods.

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Section 2

Regenera Water Sports Pilot Site SWOT Analysis

Pilot Site	Focus on Lake Näsijärvi, also Tammerkoski Rapids and Lake Pyhäjärvi area
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Abstract

A SWOT analysis is a tool used to evaluate the Strengths, Weaknesses, Opportunities, and Threats related to the natural environment and biodiversity.

Strengths (Internal Positive Factors):

- Resilient biodiversity
- Protected areas
- Community engagement
- Research and knowledge
- Supportive policies and legislation

Weaknesses (Internal Negative Factors):

- Habitat fragmentation
- Pollution
- Invasive species
- Limited funding
- Lack of public awareness

Opportunities (External Positive Factors):

- Ecotourism
- Technological advances
- Global conservation initiatives
- Environmental education
- Restoration projects

Threats (External Negative Factors):

- Climate change
- Urbanisation
- Overexploitation of resources
- Increasing pollution

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- Potential policy changes weakening environmental protections

A SWOT analysis helps in identifying these factors to develop effective conservation strategies, leveraging strengths and opportunities while addressing weaknesses and threats to ensure sustainable management and protection of biodiversity.

Opportunities	***Threats***
Development of sustainable and environmentally friendly water sport practices	Difficulties in integrating multidisciplinary teams and cost of hiring suitable disciplines
Multidisciplinary teams working together …	Sports can directly impact the natural ecosystems, habitats & water quality
Sustainable infrastructure	Long term ecological damage if management plans not implemented
Education	Increased stress on wildlife if not managed correctly
Innovative new projects	Decrease in water quality affecting humans, flora and fauna
Expansion of eco-friendly infrastructure	Potential conflicts between conservation and recreation activities
Innovative project which will encourage other communities to follow suit	Loss of vulnerable plants and animals and how close is the area to losing some?
	The future of protected species no longer secured
	Lack of local business/community support Resistance to engaging in environmental issues
	Climate change

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Pilot site analysis

Strengths	***Weaknesses***
Versatile environment	A lot of infrastructural projects and growing of city; a lot of new housing are being built by the shoreline and a new housing area in the lake (Näsisaari)
Highly aesthetic environment	The reverse side of being a very aesthetic environment
Good water quality and ecological situation	Possible presence of invasive species considering flora or fauna
Community engagement	
Growing eco-friendly infrastructure	

Opportunities	**Threats**
Development of sustainable and environmentally friendly water sport practices	Maintaining a good ecological condition must be maintained
Education	Growing tourism, cold climate tourism
Expansion of eco-friendly infrastructure	Climate change; rising water temperature, growing rains and winds
Improving the space and increasing awareness	Loss of vulnerable plants/ spreading invasive plant species
Growing interest in eco-friendly lifestyle and activities	

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