Baltic Sea Action Plan of the Cities of Helsinki and Turku for 2014–2018

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BALTIC SEA

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# Communiqué

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In 2007, the Cities of Helsinki and Turku committed to concrete voluntary action for the coastal waters and the entire Baltic Sea. This commitment resulted in the Baltic Sea Challenge. The Baltic Sea was addressed in the cities' strategic work, the City of Helsinki's strategy programme and the City of Turku's climate and environment programme.

The cities' joint Action Plan for the Baltic Sea comprised 37 concrete actions divided into nine themes, and approximately a dozen civil service departments and administrative branches from both cities were tasked with carrying out these actions. The two cities undertook to reduce their contribution to nutrient loading from point and diffuse sources, and the emissions from shipping and boating, in addition to developing their oil spill preparedness and response, and increasing research, awareness and cooperation in order to improve the state of the coastal waters and the entire Baltic Sea. The work is coordinated by the Environment Centre in Helsinki and the Environmental Division in Turku.

In addition to taking concrete action to protect the waters, the two cities undertook to invest in international environmental cooperation, research on water protection, and increasing general awareness of the Baltic Sea. In addition to taking action themselves, the two cities also invited other actors to join the initiative. Between 2007 and 2013, approximately 200 organisations from Finland and other Baltic Sea states took up the Baltic Sea Challenge. This included municipalities, companies, associations, educational institutions, regional actors, and state institutions. Almost half of these partners are associations that include interest groups, hobby associations, Rotary Clubs, and environmental associations, and approximately one third is made up of cities and municipalities. Cooperation partners also include dozens of small and medium-sized enterprises, large companies, and educational institutions, from universities to elementary schools.

As a form of activity, the Baltic Sea Challenge is unique. Its core is formed by concrete actions to protect the waters, taken at a local level and in the organisations' own operations. These measures exceed the minimum legal requirements. A great number of those that have joined the network also have their own Baltic Sea Action Plans. The Cities of Helsinki and Turku offer those partners who are part of the Baltic Sea Challenge network the opportunity to share best practices, learn about new operating models, and build bridges between different operating cultures.

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The Baltic Sea Action Plan set out by the Cities of Helsinki and Turku has now been underway for seven years and, for the most part, it has been a major success. The Action Plan has supported the cities' harbours, waterworks, rescue services, sports, building, urban planning, and education divisions, as well as international operations, in paying attention to the impact their actions have on waters. It has also increased awareness of the state of the Baltic Sea and the opportunities for influencing this matter amongst their own employees, interest groups and customers.

The Baltic Sea Challenge is not completed. Both the Baltic Marine Environment Protection Commission (HELCOM) and the European Union have had a hand in changing the national and international operating environment over the years, and more action is needed. With this new Action Plan, the Cities of Helsinki and Turku undertake to continue their work for the coastal waters and the entire Baltic Sea in 2014–2018. At the same time, they invite new actors to join the cooperation, and current partners to renew their Action Plans.

## Helsinki and Turku, November 2013

Mayor **Jussi Pajunen**  Mayor **Aleksi Randell** 

#### SUCCESSES FROM THE FIRST PROGRAMME PERIOD

The temporary (2011–2015) professorship in the economics of Baltic Sea protection granted to the University of Helsinki by the City of Helsinki has contributed to research cooperation in the economics of Baltic Sea protection, in addition to the cooperation between the City of Helsinki and the University of Helsinki.

The Protection Fund for the Archipelago Sea, established in 2007 and supported by the City of Turku, granted funding for over 30 water protection projects between 2008 and 2013. The granted funding totalled approximately EUR 300,000.

In the summers of 2012 and 2013, the Baltic Sea Challenge organised research expeditions to the sea areas on the coasts of Helsinki and Turku onboard the research vessel Muikku. This made it possible to conduct more extensive investigations into harmful substances, anoxic waters, nutrient levels and eutrophication, among other things. These investigations were conducted as a joint effort between universities, neighbouring cities, and the Marine Research Centre of the Finnish Environment Institute SYKE.

The partner network of the Baltic Sea Challenge includes approximately 200 organisations, which carry out their own actions for the Baltic Sea. These partners comprise over 70 municipalities and cities, 45 associations, 35 companies, 30 regional and provincial actors or civil service departments, and 20 educational institutions.

# **NEW OPERATING ENVIRONMENT**

# 1. INTERNATIONAL AND NATIONAL PERSPECTIVES

The joint efforts between the cities of Helsinki and Turku for the Baltic Sea support both national and international Baltic Sea processes. In 2007, the ministerial meeting of the Baltic Marine Environment Protection Commission (HELCOM) approved the Baltic Sea Action Plan, which determines the good ecological state of the Baltic Sea and its indicators, in terms of eutrophication, harmful substances, biodiversity and shipping. The aim of the Action Plan is to restore the good ecological status of the sea by the year 2021: a healthy marine environment with diverse biological components functioning in balance. HELCOM's Action Plan was reviewed in a ministerial meeting towards the end of 2013, in terms of emission reduction targets.

The European Union's Marine Strategy Framework Directive (2008/56/EC) was executed in Finland via national legislation with the Act on Water and Marine Resources Management (30 December 2004/1299, 2011/272) and the government Decree on the Management of the Marine Environment (25 August 2011/980). The aim of the Marine Strategy Framework Directive is to create a common framework for those actions by member states of the EU that are necessary for the restoration and preservation of the good state of the marine environment by the year 2020. The first part of the national marine resources management plan was completed in 2012, the monitoring programme will be completed in 2014, and the Action Plan in 2015. The water resources management plans for the second planning period (2016–2021) will be prepared in 2014–2015, in accordance with the Act on Water Resources Management.

The European Union's Strategy and Action Plan for the Baltic Sea Region were approved by the European Council in October 2009. This first internal macro regional strategy set out by the EU makes the balanced development of the region more effective, makes the actions taken by the EU, countries, regions, networks, and actors at a local level more unified, and promotes cooperation between these actors. The Action Plan related to the Strategy for the Baltic Sea Region was updated in 2012, and the Commission published its first evaluation of the success of the strategy in the summer of 2013. According to the evaluation, the intensified cooperation has produced joint political decisions and hundreds of new projects and networks. However, to achieve permanent results, the strategy's goals need to be further incorporated into the administration, funding, and political decision-making in the region.

The joint Baltic Sea Action Plan between the cities of Turku and Helsinki promotes all of the more extensive programmes mentioned above, as well as implementing and supporting their goals. It also supports the commitment of the Finnish government to make Finland into a model country for the recycling of nutrients. Through this joint initiative, the cities act as active trendsetters and major actors in the Baltic Sea region.

# 2. THE STRATEGIC BACKGROUND OF THE BALTIC SEA COOPERATION IN HELSINKI AND TURKU

# Environmental Policy of the City of Helsinki

On 26 September 2012, Helsinki City Council approved the city's environmental policy, which includes both medium length (by 2020) and long-term (by 2050) goals. The Baltic Sea Challenge initiative and the cities' Action Plan were used in preparing the environmental policy, which affected how the policy was shaped. According to the environmental policy and the related background note, the actions taken by the city for the Baltic Sea Challenge include the goal to restore the good ecological status of the marine environment off the coast of Helsinki by 2020, in accordance with the EU Marine Strategy Framework Directive, and to carry out the restoration of the good status of the coastal waters by 2027, by undertaking additional actions in accordance with the Water Resources. Management Plan. Another goal is to make the city's own oil spill response and prevention highly effective in most environmental conditions. in terms of the amount of oil that enters inhabited beach areas and the extent of the spills. Helsinki also aims to make the oil spill response assistance provided to the islands in the Baltic Sea highly effective.

The goals for surface water protection by 2020 include building a concentrated water supply and sewerage in the main recreational islands of Helsinki, reducing the amount of overflow from the combined sewer system by 20% from their current levels, removing obstructions that prevent fish passage, ensuring that oil spill response prevents oil spills from spreading, and that shore conservation and the recovery of oil from the surface of water are effective. The goals also include obtaining a sufficient number of trained people for beach clean-up operations.

By 2050, Helsinki aims to further reduce its own nutrient loading in waters, make the utilisation of nutrients



more effective, reduce the amount of overflow from the combined sewer system by half from current levels, and ensure that oil spill response prevents oil from spreading to inhabited beaches under most conditions. The joint goal of environmental management and partnerships is to have 300 actors take up the Baltic Sea Challenge by 2020. The city will provide support for the actors, in order to implement high quality action plans that strengthen the conservation of the Baltic Sea. In connection with this, the environmental policy's background note states that the two most important projects that promote partnerships in environmental protection in Helsinki are the Baltic Sea Challenge, initiated by the mayors of Helsinki and Turku, and the EcoCompass project, targeted at small and medium-sized enterprises in the Helsinki Metropolitan Area and funded by the European Union. The background note also states that the environmental policy aims to systematically develop and expand these concepts.

# The City of Turku and the Baltic Sea

The City of Turku is located at the junction of the Baltic Sea. Turku is the centre of Finland's maritime cluster and it has invested heavily in cooperation in the Baltic Sea region. Actions taken by Turku include hosting the Environment Secretariat of the Union of Baltic Cities, and taking part in establishing the Centrum Balticum Foundation and the related Protection Fund for the Archipelago Sea. The City of Turku also acts as a coordinator for the horizontal action 'Neighbours' of the EU Strategy for the Baltic Sea Region and coordinates the Turku process, which promotes European cooperation with the City of St Petersburg and the Leningrad Oblast, in particular.

Protecting the Baltic Sea and other waters is a clear focus area in the City of Turku's regional cooperation. The city's first climate and environment programme was adopted in 2009. One of the goals of the programme is to reduce the city's impact on the status of waters, including groundwater, inland waters and the marine area, and to carry out restorative actions to improve the status of waters and groundwater.

Key methods include effective cleaning of urban wastewater at the Kakolanmäki Wastewater Treatment Plant, and carrying out the actions set out in Turku and Helsinki's joint Baltic Sea Action Plan, the city's storm water handling programme, the development plan for the city's water supply and sewerage, and the protection plans related to classified groundwater areas. Another goal is to take care of the state of the inland waters within the city, in particular, taking into consideration the special characteristics of Lake Kakskerranjärvi and the actions taken there.

The good ecological status of the Archipelago Sea, which is the section of the Baltic Sea closest to Turku, is an important factor in the well-being and comfort of the residents of Turku, and the city's competitiveness. Investing in the Baltic Sea, water protection and sustainable development will continue to be a natural part of the city's operations in the future.

# 3. PEER REVIEW OF THE ACTION PLAN FOR THE PERIOD 2007–2012

The peer review of the first joint Baltic Sea Action Plan between the cities of Helsinki and Turku was carried out by the Sustainable Community Unit and the Environmental Protection Department of the City of Tampere<sup>1</sup>. The review was commissioned as support for the planning of the new programme period. During spring 2013, the reviewers collected accounts about the programme's contents and implementation directly from the cities' administrative branches by interviewing their representatives.

The administrative branches of Turku that were interviewed included representatives from Turku Water Utility, the Environmental Protection Department, the Property Management Division, Turku University of Applied Sciences, the Education Division, the Port of Turku, the Central Administration, Southwest Finland Rescue Services, and Centrum Balticum. In Helsinki, the actors who were interviewed included representatives from the City Planning Department, the Port of Helsinki, the Sports Department, the Real Estate Department, the Public Works Department, the Stara construction service, the Education Department, Helsinki Zoo in Korkeasaari, the Rescue Department, and the Environment Centre.

In addition to conducting interviews, the reviewers were supplied with material packages compiled by the Baltic Sea Challenge work group (meeting memorandums of the cities' Baltic Sea work groups and annual outturn tables of measures taken), the websites of various civil service departments and the Baltic Sea Challenge, in addition to the theses of Janette Leppänen (2011<sup>2</sup>) and Inna Harju (2010<sup>3</sup>). The results of the review and the recommendations based on it have been taken into consideration in the new Action Plan.

<sup>&</sup>lt;sup>1</sup>Sustainable Development Planner Sanna Huikuri, Rural Planner Eeva Palmolahti, and Environmental Protection Manager Harri Willberg

<sup>&</sup>lt;sup>2</sup> The Baltic Sea Challenge – succeeding from the participants' point of view, thesis (Turku University of Applied Sciences), degree programme in sustainable development, 2011 <sup>3</sup> The City of Helsinki and the evaluation of the Baltic Sea Challenge-actions, City of Helsinki Environment Centre publications 8/2010

# KEY RESULTS OF THE REVIEW

'The Baltic Sea Challenge has increased discussion and the people in administrative positions have a better idea of what others are doing. One plus one really is more than two.'

#### SUCCESSES

- The Baltic Sea Challenge has prompted the cities' actors to consider matters related to waters and the environment more often and in more depth.
- The Baltic Sea Challenge has formed connections between the internal operations of the cities, helped the actors see things holistically, and involved new actors in operations. It has created a shared and structured way of operating in both cities.
- The commitment of the top level management to the Baltic Sea
  Challenge has been a strong force in moving the work forward.
- The Baltic Sea Challenge has made it possible to carry out some actions early on in the process, and helped procure resources.
- The Baltic Sea Challenge is regarded as a positive thing that helps reshape the cities' image.

#### ROOM FOR DEVELOPMENT

- Administrative boundaries hinder cooperation. The vast majority of actors are part of the city administration of the two cities, but the role of regional actors is unclear in some respects.
- In the absence of functional indicators, the effectiveness of some actions is difficult to measure.
- It is difficult to discern what parts of sustainable development and the increase in environmental awareness are as a result of the Baltic Sea Challenge.
- From the point of view of administrative branches, the concrete actions to protect waters taken by the partners who have taken up the initiative have not received enough visibility, and the possibility to invite other actors to join the Baltic Sea Challenge has not been sufficiently utilised in the cities' own work.
- In its current form, the Baltic Sea Challenge is an administrative tool, although elements could be utilised more extensively to increase the awareness of the cities' residents about the Baltic Sea.

#### RECOMMENDATIONS

- Adjusting the goals and actions so that they are more concrete and can be more easily measured.
- Focusing the operations more heavily on the actors in the drainage areas, in order to reduce the nutrient load that enters waters and to improve the effectiveness of these operations.
- Conscious utilisation of the visibility and cooperation provided by important projects and events.
- More visibility for the actions and successes of the organisations that have taken up the Baltic Sea Challenge.
- Shifting the focus of the actions from increasing awareness to participation.

# FIVE WAVES OF ACTION FOR THE BALTIC SEA

 THE NEW GOALS ESTABLISHED FOR THE PROGRAMME PERIOD 2014–2018 ARE CONSISTENT WITH THE BALTIC MARINE ENVIRONMENT PROTECTION COMMISSION'S ACTION PLAN, THE MARINE STRATEGY FRAMEWORK DIRECTIVE AND CORRESPONDINGLY, THE DIVISIONS OF THE NATIONAL MARINE RESOURCES MANAGEMENT PLAN. THE NEW BALTIC SEA ACTION PLAN SET OUT BY THE CITIES OF HELSINKI AND TURKU SUPPORTS WORK TOWARDS THE FOLLOWING GOALS:

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1. Clear coastal waters

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- 2. Healthy marine habitat
- 3. Clean and safe water traffic
- 4. Systematic water area management
- 5 Active Baltic Sea citizenship

# **1. CLEAR COASTAL WATERS**

Eutrophication is a major problem for the Baltic Sea and for the inland waters located in the Baltic Sea drainage area. It has an adverse impact on the entire marine ecosystem in various ways, and significantly weakens the opportunities present in coastal waters in particular, such as recreational use, tourism, and fish stocks, among other things. To the cities of Helsinki and Turku, the sea is an important competitive factor and a source of the residents' comfort. The actions listed under this theme aim to reduce the nutrient load, consisting of phosphorus and nitrogen, which enters the cities' waters and the Baltic Sea and causes eutrophication.

# SUCCESSES FROM THE PREVIOUS PERIOD

# The sewer system and wastewater:

**Turku:** The Kakolanmäki Wastewater Treatment Plant, which treats the municipal wastewater in the Turku region, commenced operations at the beginning of 2009. The treatment plant achieves better results than required by the environmental permit, in terms of concentrations and treatment efficiency.

## Storm water:

The storm water strategy of the City of Helsinki was adopted in 2007, and the storm water management programme of the City of Turku in 2009. Administrative branches implement these in town planning, building permits and related agreements, in particular.

#### Agriculture:

Terms and conditions related to water pollution control have been added to lease agreements for arable lands and renewals of such agreements, and the need for buffer zones, for example, is also reviewed at the same time.

**Helsinki**: The city's own cultivated fields are fertilised in moderation, in accordance with the terms of the environmental subsidies, and soil fertility analyses and the needs of the various plant species are also taken into account. Nutrient balances have been calculated since 2008. No industrial phosphorus fertilisers were used between 2009 and 2013. **Helsinki:** The goal of cultivating 25–35% of the amount of arable field by applying the direct seeding method has been achieved.

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**Turku:** Wetlands, submerged dams and sedimentation basins have been implemented in Ruissalo, Rauvonlahti, Kakskerta and Paattinen.

Turku: The city's arable lands are organically farmed.

# Scattered real estate in the archipelago and recreation grounds:

**Helsinki:** The Sports Department conducted an investigation into wastewaters in 2010. The wastewater systems for real estate that is situated in recreation grounds outside the sewer system have been systematically modified and renovated in Kaunissaari, Pihlajasaari and the Seurasaari swimming area, among other places. The city's scattered real estate which falls outside the sewer system and which is managed by the Real Estate Department was assessed in 2008, after which some sites were renovated, sold or demolished.

**Turku:** The wastewater treatment plant for the real estate on the recreational island of Vepsä was completed in 2011. The wastewater treatment plant for the Sauvo-Ahtela camping area has been remodelled and the camping areas in Maisaari and Pähkinäinen have also been equipped with wastewater treatment systems.

# ACTIONS 2014-2018

# PROJECTS AND ACTIONS CONTINUING FROM THE PREVIOUS PERIOD

#### Sewer system and wastewater:

Renovations of sewer systems and reducing the use of combination sewers in accordance with the development plan for the city's water supply and sewerage.

Utilisation of sewage sludge, produced by wastewater treatment plants, in the city's own green areas and in green area construction.

• **Turku:** Reusing over 50% of the nutrients contained in sewage sludge in green area construction.

**Helsinki:** Implementing the Baltic Sea Challenge Action Plan for the period 2012–2014 set out by the Helsinki Region Environmental Services Authority (HSY): managing investments, storm waters and overflows, reducing diffuse sources of pollution, conducting research projects and increasing awareness and international cooperation.

**Turku:** Biogasification of sewage sludge into electricity and heat.

#### **RESPONSIBLE PARTIES:**

Helsinki: the Helsinki Region Environmental Services Authority (HSY Water Services) Turku: Turku Water Utility, Turun seudun puhdistamo Oy (Turku Region Wastewater Treatment Ltd), the Property Management Division)

#### Storm water:

Supporting the implementation of the cities' storm water strategy and programme by:

Choosing storm water management and processing solutions on a case by case basis, in accordance with the order of priority in the storm water strategy. The selected solution is explained separately as part of the planning process. Taking storm water related matters into consideration in all building permits and exceptional permits by 2016.

Taking storm water related matters into consideration when preparing master plans and city plans, and providing sufficient clarification and necessary plan provisions.

Conducting research and restoration projects on brooks and other small bodies of water, and implementing storm water solutions in small drainage areas, in accordance with the plans of each administrative branch.

#### **RESPONSIBLE PARTIES:** All administrative branches

# Agriculture:

Placing buffer strips in all city-owned arable lands in accordance with environmental support requirements, and planning and, if possible, establishing buffer zones, wetlands and submerged dams alongside rivers and brooks.

Industrial phosphorus fertilisers will not be used on arable land cultivated by the city.

Committing to the terms and conditions related to the environmental support, and monitoring the nutrient balance in the city's own arable land in accordance with average yields.

Continuing to include the requirements related to water pollution control in lease agreements for arable land.

Keeping 60% of the amount of arable land cultivated by the city covered in plants every year during winter.

**Turku:** Applying organic farming to 100% of the amount of arable land cultivated by the city every year.

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RESPONSIBLE PARTIES: Helsinki: the Public Works Department (HKR), Stara construction service Turku: the Property Management Division

# Real estate in sparsely populated areas:

Reviewing the renovation needs of the sewer systems.

Supporting the establishment and operations of wastewater corporations.

RESPONSIBLE PARTIES: Helsinki: the Real Estate Department, the Sports Department Turku: the Central Administration, the Environmental Division

# **NEW ACTIONS**

# Sewer system and wastewater:

**Helsinki:** Updating the Baltic Sea Challenge Action Plan of the Helsinki Region Environmental Services Authority (HSY) during 2014.

**Turku:** Reducing the amount of network leakages and by-passes by renovating the sewer network and increasing separate sewerage systems for wastewater and storm water.

**Turku:** Taking the goals of the Baltic Sea Challenge into account when updating the wastewater treatment plant strategy.

# **RESPONSIBLE PARTIES:**

**Helsinki:** the Helsinki Region Environmental Services Authority (HSY)

**Turku:** Turku Water Utility, Turun seudun puhdistamo Oy (Turku Region Wastewater Treatment Ltd)



# Storm water:

Organising training for administrative branches every year to increase people's knowledge about storm water. Instructing planning, architectural and engineering companies about the cities' practices.

Taking the dynamics of the drainage area and sub-drainage areas into consideration when preparing area, project and implementation plans.

Promoting the adoption of green factors in city planning.

Preparing pilot sites for storm water control in urban areas as a joint effort with housing cooperatives and planning offices.

- Constructing a model site in Helsinki central area, in which the storm waters from rooftops are directed to inner courtyards, slowed down and then drained through constructed channels, wetlands and pools.
- A similar pilot will also be carried out in the suburbs of Helsinki, in a more spaciously constructed old area, or on a school yard, for example.
- A pilot solution will also be implemented in the urban area of Turku by the end of 2015.

Monitoring of storm water loads will be launched in both cities.

Increasing the number of multipurpose green spaces and open solutions for storm water issues in all city plans, and ensuring implementation through cooperation between administrative branches.

**Helsinki:** Research cooperation with the University of Helsinki in issues related to storm water.

#### **RESPONSIBLE PARTIES:**

**Helsinki**: the City Planning Department, the Public Works Department (HKR), the Environment Centre and other administrative branches involved in implementing and monitoring the storm water strategy

**Turku:** the Property Management Division, the Environmental Division

# Recreation grounds and scattered real estate:

Developing the wastewater management of outdoor activity centres and sports facilities by renovating the sewer systems of these sites, or by building joint sewer systems, so that all sites are in working condition by 2018.

Preparing new guidance and monitoring projects for those who own scattered real estate in drainage areas around rivers. These projects will be prepared in cooperation with water protection associations and other regional actors.

• Helsinki: Participation in the project by Vantaanjoen vesiensuojeluyhdistys (the Water Protection Association of the River Vantaa), which aims to set up a local joint processing point for sparsely populated areas. The purpose of the processing point is the lime stabilisation of sewage sludge.

Reducing the use of industrial fertilisers in the cities' parks and green areas. Using only long-acting and slowly dissolving fertilisers.

#### **RESPONSIBLE PARTIES:**

Helsinki: the Sports Department, the Real Estate Department, the Public Works Department (HKR), the Environment Centre Turku: the Property Management Division, the Recreation Division

# Agriculture and green area construction:

Testing the use of gypsum in soil improvement.

• **Helsinki:** Implementing the Nutrient Catcher project during the programme period in cooperation with the University of Helsinki. The project will be carried out in horse pastures located within the city.

Identifying major sources of loading caused by agriculture in the drainage area. This is a joint effort with water protection associations. Preparing a project for building sedimentation basins and wetlands, in addition to ensuring their upkeep and maintenance.

**Helsinki:** Developing the utilisation of recyclable material flows in green area construction.

**Helsinki:** Preparing a new research project for water protection in agriculture as a joint effort with the University of Helsinki's Faculty of Agriculture and Forestry.

# RESPONSIBLE PARTIES:

**Helsinki:** the Public Works Department, Stara construction service, the Environment Centre, HSY **Turku:** the Property Management Division

- Other municipalities
- Waterworks
- Agriculture organisations, water protection associations, the University of Helsinki, the University of Turku, Åbo Akademi
- New: planning firms, water protection associations, property owners and housing companies



# 2. HEALTHY MARINE HABITAT

Harmful substances, such as persistent organic pollutants, and marine litter and noise have an adverse impact on the marine environment, peoples' health, and the recreational use of the marine environment. They also cause economic disadvantages to the business activities on the coast. The actions listed under this theme aim to reduce the concentrations of harmful substances, the amount of litter and noise in the marine environment, so that the marine habitat is healthy and marine resources can be utilised in a sustainable way.

# SUCCESSES FROM THE PREVIOUS PERIOD

Investigation into a joint repository for contaminated sediments, conducted in cooperation with the Finnish Port Association in 2009.

**Turku:** Cleaning and dredging of the River Aura, during which contaminated dredging spoils were processed through process stabilisation and placed into the Pansio harbour basin.

# ACTIONS 2014-2018

# PROJECTS AND ACTIONS CONTINUING FROM THE PREVIOUS PERIOD

Continuing the assessments started in 2012 into microparticles in sediments and water as a joint effort between universities, waterworks, water protection associations, and the Finnish Environment Institute SYKE. The goal of the assessment is to form a clear picture of the current state of the marine litter by 2016.

 Turku: In order to carry out dredging, the city continues
searching for locations on land and in the sea that can be used for disposing of sediments and that have fewer adverse effects on the environment. Contaminated sediments are deposited on land.

# **NEW ACTIONS**

Assessing the quality of sediment each time the city carries out dredging in small boat harbours.

Utilising the results gained from marine litter assessments to analyse the sources of litter and to reduce the amount of littering in the city. Organising a beach cleaning campaign in both cities every year during the programme period.

Developing means for reducing the amount of litter caused by depositing snow.

- Planning where to deposit snow on the streets. These spaces will also be used for processing storm waters.
- **Helsinki:** Identifying means for reducing the amount of litter caused by depositing snow and developing alternative methods for depositing snow by 2016.

Participating in assessment projects by 2018 concerning harmful substances contained in wastewater and sewage sludge that cause particular concern. These projects will also look for opportunities for reducing these substances.

Aiming for natural prevention of weeds and pests. The use of chemical pesticides is restricted in parks and green areas, and only occurs when absolutely necessary.

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Communicating the quality of storm water to administrative branches. Analysing both the quality of storm water and the related pollutants.

- Determining the need for storm water processing and considering clarification of the cleaning regulations related to the cities' environmental protection regulations or building regulations.
- Preparing instructions concerning the use of water on construction sites and ensuring these instructions are observed on all construction sites.
- **Helsinki:** Carrying out a biofiltration test by 2018, with the side of a high-traffic arterial road as the pilot site.

Collaboration to assess the state of underwater noise.

• **Helsinki:** Building an underwater measuring and listening point by 2016, within the framework of the BIAS project (Baltic Sea Information on the Acoustic Soundscape).

## **RESPONSIBLE PARTIES:**

Helsinki: the Public Works Department (HKR), the Environment Centre, the Sports Department, the City Planning Department, HSY Turku: Port of Turku Ltd, the Property Management Division, the Environmental Division, Turku Water Utility, Turun seudun puhdistamo Oy (Turku Region Wastewater Treatment Ltd)

- Water protection associations
- The Finnish Water Utilities Association (FIWA)
- The Finnish Environment Institute (SYKE)
- University of Helsinki, University of Turku
- Boat clubs, harbours, the Finnish Port Association, Suomen Purjehdus ja Veneily ry (the Finnish Sailing and Boating Federation), the Keep the Archipelago Tidy Association, several local associations and actors
- New: Constructors, city district organisations, property owners and housing companies





# **3. CLEAN AND SAFE WATER TRAFFIC**

Maritime transport in the Baltic Sea and in the Gulf of Finland in particular has continued to grow rapidly in recent years and the growth is expected to continue. Growth has been particularly remarkable in the transportation of oil and chemicals, and passenger traffic. Recreational boating, an important form of recreation in coastal and inland waters, brings tens of thousands of ships to these waters. As the amount of water traffic in the Baltic Sea increases, the risk of accidents also grows. The actions listed under this theme aim to reduce and prevent emissions produced by vessels of various sizes from entering the air and water, and ensuring sufficient prevention of oil and chemical spills.

# SUCCESSES FROM THE PREVIOUS PERIOD

Freeing international cruise ships from the obligation to pay a separate wastewater fee and incorporating this fee in the waste management fee.

• **Helsinki:** Improving the sewer capacity at every berth. The amount of wastewater entered into the sewer multiplied between 2007 and 2010, from approximately 10,000 m<sup>3</sup> to over 50,000 m<sup>3</sup>.

Installing equipment that small boats can use for emptying their septic tanks: 7 pieces of equipment in Helsinki and 4 in Turku.

Arranging oil spill response training for city employees and improving beach cleaning preparedness.

Preparing a functional process description of the oil spill prevention duties of the Rescue Department's flying squad, and training the teams.

**Helsinki**: Installing over 150 anchor bolts in oil spill response zones I to III and acquiring four kilometres of containment booms.

**Helsinki:** Building a large scale land-based power supply in Katajanokka, Helsinki, for Viking Line's cruise ships. The Port of Helsinki invested a total of EUR 1.4 million in the project.

# ACTIONS 2014-2018

# PROJECTS AND ACTIONS CONTINUING FROM THE PREVIOUS PERIOD

Continuing the waste management fee practice.

Installing, on average, one new piece of equipment for collecting wastewater from the septic tanks of small boats per year, and taking care of the functionality and maintenance of the equipment.

Participating actively in developing current environmental considerations related to port operations and boat traffic, influencing future regulations and participating in networks and development projects.

Working in cooperation to improve oil spill response preparedness in Helsinki, in accordance with the oil spill prevention plan approved by the City Administration and confirmed by the Finnish Oil Pollution Compensation Fund, and similarly in Turku, in accordance with the oil spill prevention plan of Southwest Finland. During the Baltic Sea Challenge's programme period, other measures aimed at improving oil spill response will also be prepared.

 Improving the joint operating model between cities and rescue departments for rescue operations and preparedness for environmental accidents taking place at sea.

- Planning and installing anchor bolts in preparation for oil spill response operations, and investing in oil spill containment booms and new oil spill response vessels.
- Improving the overall beach cleaning and oil spill response system in the Gulf of Finland and the Archipelago Sea, in cooperation with other actors.
- Organising joint instructor training for rescue service employees. Training the cities' employees for oil spill response operations.
- **Turku:** Making preparations for the construction of an oil spill response depot.
- **Turku:** Continuing the implementation of the project for the renewal and refurbishment of rescue vessels intended for oil spill response operations in 2013–2018.

**Helsinki:** Between 2013 and 2015, the city will assess experiences in using shore power, as well as its costs and advantages, and the city will also submit any necessary proposals for further development.

# **NEW ACTIONS**

Developing the maintenance services for river and archipelago traffic.

- **Helsinki:** Construction of a maintenance and service base.
- **Turku:** Construction of a wastewater discharge system for river vessels in 2014, so that vessels can discharge their wastewater on land.

Identifying opportunities for the utilisation of new waste fractions, i.e., oily waste, scrubber water, and sludge, in a new joint project.

Developing a system by 2015 for receiving feedback related to the equipment for emptying the septic tanks of small boats.

Assessing the scrap vessels located within the city by 2018, and making sure that they do not cause adverse environmental effects.



**Helsinki:** Preparing a plan to build a facility for cleaning boat bottoms. From the facility, the cleaning water will be guided to the sewer.

## **RESPONSIBLE PARTIES:**

Helsinki: the Port of Helsinki, the Sports Department, the Rescue Department, the Public Works Department (HKR) Turku: Port of Turku Ltd, Southwest Finland Rescue Services, the Property Management Division

- Harbour cities in Finland and other countries in the Baltic Sea region
- Harbours and shipping companies in Finland and other countries in the Baltic Sea region
- Boat clubs, Suomen Purjehdus ja Veneily ry (Finnish Sailing and Boating Federation)
- Regional and national rescue services

# 4. SYSTEMATIC WATER AREA MANAGEMENT

Marine areas and waters are the object of society's versatile forms of utilisation, needs, and operations, which puts pressure on both the environment and the sustainable use of water areas. Simultaneously, loading risks are increasing due to climate change, among other factors. The actions listed under this theme aim to make sure that planning takes into account any changes in environmental and human pressures, in addition to the fact that various functions are often concentrated in the same areas. This way, it is possible to combine and progress the synergies of different forms of use, and to prepare for possible future conflicts.

# SUCCESSES FROM THE PREVIOUS PERIOD

The previous Baltic Sea programme period did not include actions related to the planning of the use of water areas.

# ACTIONS 2014-2018

# **NEW ACTIONS**

Supporting provincial marine spatial planning by participating in the planning process and by being familiar with where the functions are located in the city's own marine areas, and how sensitive the underwater sites are.

 Supplementing the information about underwater habitats and preparing a map-based presentation on where various functions are located in relation to the sensitive underwater sites.

Improving the monitoring of the state of the marine area in cooperation with Metsähallitus (the Forestry Office), the
Finnish Environment Institute (SYKE) and various projects, in order to assess underwater habitats in the cities' marine areas, and to take them into consideration when planning and locating functions. Testing the new map-based tools in

marine spatial planning that are being developed as a joint effort with the Finnish Environment Centre.

Assigning responsibilities to the cities' administrative branches in relation to the functions in marine areas, agreeing on the principles for coordinating overlapping functions, and taking recreational and environmental values into consideration when locating functions.

Establishing goals for the use of the beaches and for the services provided in the archipelago area from the point of view of housing, business activities, tourism, recreational activities, and landscape conservation. Compiling functions, responsibilities and goals related to the cities' marine areas and the archipelago into one city-specific document by 2017.

• Helsinki: Supporting the preparations and goals of the intersectoral Merellinen Helsinki (Maritime Helsinki) programme.



**RESPONSIBLE PARTIES:** 

All administrative branches

- The Finnish Environment Institute (SYKE)
- Regional councils
- Seaside municipalities
- Research institutes and projects lead by them, even outside Finland
- Users of the water areas, property owners and service providers in the archipelago

# **5. ACTIVE BALTIC SEA CITIZENSHIP**

Increasing of awareness is a necessary and efficient tool that can be used by city offices, subcontractors, and customers when the aim is to influence opinions, attitudes and decisions that concern the Baltic Sea. By increasing awareness, concrete actions become easier to carry out. However, awareness alone is not enough, and active participation as actors is also needed. The actions listed under this theme aim to promote awareness of the state of the Baltic Sea, and about how one can influence this matter, in addition to connecting this awareness to financial opportunities and competitiveness. Another goal is to strengthen the participation of various interest groups, and expand their thoughts about the Baltic Sea by sharing information and experiences. This way, they can learn how to influence their own reference group through their own actions.

# SUCCESSES FROM THE PREVIOUS PERIOD

Administrative branches have organised events and training and emphasised the Baltic Sea in relation to matters concerning the environment and eco-support.

In 2010–2012, the Cities for a Healthier Sea project trained Finnish, Estonian and Latvian municipal actors, decision-makers, and experts, and produced a guide for voluntary water protection activities in municipalities. The project was coordinated by the City of Helsinki, and the City of Turku took part as a partner.

As an associate partner for the BalticSeaNow.info project, the Baltic Sea Challenge participated in the development of various public events, participatory methods and online tools in 2009–2012, in order to increase awareness of the Baltic Sea among the residents of the region.

The Baltic Sea Challenge took part in the Kotka Maritime Festival in 2011 and 2012, the Civic Market Place at the SuomiAreena event in Pori in 2012, and the event's programme in 2013, the World Village Festival in 2012, and the Baltic Sea Corner during the Tall Ships Races event in Helsinki in 2013. This gained visibility for the Baltic Sea Challenge and the cities' actions, and an opportunity to discuss everyday decisions regarding protecting waters with residents and tourists.

The Meremme tähden (For Our Sea) events held in Rauma in March 2012 and 2013, organised in cooperation with the Raumanmeri Rotary Club, gathered more than 500 interested people, who listened to expert presentations about the Baltic Sea and its current state.

# ACTIONS 2014-2018

# PROJECTS AND ACTIONS CONTINUING FROM THE PREVIOUS PERIOD

Active utilisation of the results gained from research projects and the professorship granted to the University of Helsinki in communication with residents, events, popular tourist spots and in evaluating the economic efficiency of one's own actions. **Turku:** Continued support for the Protection Fund for the Archipelago Sea, and informing the residents in the area about the fund's objectives and realised projects.

# **NEW ACTIONS**

# Internal operations of the cities:

Supporting the development of the water pollution control criteria for the cities' procurement processes as part of the environmental criteria, and in the procurement of food in particular.

Utilising the cities' expertise in the protection of the Baltic Sea in the planning and implementation of tourism, recreational use and congress visits.

Addressing the Baltic Sea perspective in twin town operations, international operations, city networks, bilateral activities, and EU projects, and utilising the EU Strategy for the Baltic Sea Region to increase the visibility of the cities and promote the municipal perspective.

Recruiting in alternate years a fixed-term employee from a country in the Baltic Sea region to produce a situation report about the situation related to the Baltic Sea Challenge in that person's native country, and to help spread awareness of the Baltic Sea Challenge.

**Helsinki:** The Central Administration will establish a Baltic Sea team in 2014, which will be in charge of ensuring that water pollution control matters are taken into consideration at a city level and among subcontractors and customers in relation to business, regional construction, funding, communication, and event organisation matters.

# RESPONSIBLE PARTIES:

Helsinki: the City Executive Office, the Environment Centre, the Sports Department, the Public Works Department (HKR), Helsinki Zoo in Korkeasaari, the Education Department Turku: the Central Administration, the Environmental Division



# Education and communication activities:

Inviting schools to take up the Baltic Sea Challenge and develop Baltic Sea related activities with environmental education projects, by organising further education opportunities for teachers, encouraging schools to visit beaches, training schools' environmental groups, and organising Baltic Sea themed events for pupils in cooperation with nature schools, so that five schools take up the Baltic Sea Challenge per year.

Organising clean-up campaigns and visits to beaches as part of the cities' annual nature tours and environmental education activities, and in cooperation with community associations and environmental associations, in addition to improving the coordination of voluntary work by creating a beach mentor or river caretaker concept, for example.

Producing communication materials for key tourist attractions and the organisers of major events 2016, in addition to guides about the coastal waters of the cities, the Baltic Sea, and the impact of a person's own decisions on such waters. These materials will also be utilised in international operations.

• Helsinki: Creating a project with Helsinki Zoo in 2014, as a part of the section of the island's ten-year plan that concerns the Baltic Sea, in terms of both the back ground technology and catching the attention of visitors.

Producing materials related to the adverse impact and prevention of littering and microparticles by 2016.

The Helsinki Centre and Turku Centre in St Petersburg will work together to arrange a media visit to Finland concerning the state of the Baltic Sea.

The Helsinki EU office will organise an annual event for influential EU actors in relation to environmental matters that concern the Baltic Sea, and the Turku EU office will address the city's Baltic Sea Action Plan and the Baltic Sea Challenge in its communication with interest groups.

# RESPONSIBLE PARTIES:

Helsinki: the City Executive Office, the Education Department, the Public Works Department (HKR), the Environment Centre, Helsinki Zoo in Korkeasaari Turku: the Education Division, the Environmental Division, the Central Administration

# Service operations:

Developing the Kerro kartalla service (tell on the map, Helsinki) and the feedback service (Turku) in terms of coastal and water observations.

Working in cooperation with cultural and event management offices to increase the attention paid to water pollution control considerations in the cultural and major event subsidies granted by the cities. This development work is to be carried out by 2016.

# **RESPONSIBLE PARTIES:**

Helsinki: the Public Works Department (HKR), the City Executive Office, the Cultural Office, the Environment Centre Turku: the Central Administration, the Environmental Division

# Network cooperation in the Baltic Sea Challenge:

Increasing cooperation with regional water protection associations, in order to pay more attention to the drainage area perspective in projects and communication.

- Regional water protection associations will be invited to attend the meetings of the working committee once a year.
- Helsinki: Supporting a water protection association in implementing the River Vantaa portal and building display boards alongside major roads that constantly measure the quality of water.

The partner network of the Baltic Sea Challenge will be invited to update their own action plans or undertake other new water protection activities, and the goal is to obtain at least 20 new action plans by the end of 2014.

 Working together with water protection associations to develop a concept for companies concerning funding for additional water observation and research activities that would be conducted on a voluntary basis.

Utilising social media as a forum for promoting each new concrete action that is taken both in Finland and by partner cities in other countries.

Launching the operations of the international steering group of the Baltic Sea Challenge with other partner cities in the Baltic Sea region.

RESPONSIBLE PARTIES: Helsinki: the Environment Centre, the City Executive Office Turku: the Environmental Division

- Central Administrations of cities, customers and residents
- Schools, water protection associations, universities
- 200 organisations involved in the partner network of the Baltic Sea Challenge
- New: Contractors and subcontractors, consumer cooperatives, procurement centres, event organisers, city district organisations and environmental associations, customers, tourism, twin towns, local and regional authorities, and the contact persons for the EU Strategy for the Baltic Sea.



# THE BALTIC SEA CHALLENGE

www.balticseachallenge.net



