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City Blues pilot in Tampere

D 2.1 Reports on the implemented watershed pilots

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Summary

This report describes the implementation of the City Blues pilot in Tampere, Finland and summarises the NBS governance model of the City of Tampere.

The City Blues pilot area called Varsanpuisto was renovated by constructing new flood meadows for stormwater retention and treatment. These will help to prepare for the increasing amounts of water caused by climate change and changes in land use in the upstream area, as well as reducing the flooding already observed in the catchment area. Flood meadows improve stormwater management and increase biodiversity.

The park was renovated also more pleasant for the users by adding new benches and trash bins, improving pathways and increasing blooming species. Seedlings and seeds of local species were planted in the area to support biodiversity and enhance beauty. This was the first time in Tampere that local plants were used to create a meadow in a wet environment. Fish migration was enabled in the design and implementation of the dam and bridge structures.

The planning phase started in March 2024 and finished in October 2024. The construction phase took place between February and June 2025. Planting of local species was partly done in voluntary events in May and October 2025. Maintenance of the site continues and there will be complementary planting in 2026.

Collaboration among stakeholders was active in all phases. Special focus was set on general planning when the ideas and tacit knowledge of the residents was collected in a workshop. Local urban farmers and pupils of the school for vulnerable young people located in the area were contacted to obtain their views on the plans as well. A wide range of professionals from different fields contributed to the design and construction of the solutions.

Main lessons learned from planning, construction and stakeholder engagement are shared. Several observations related to the fact that careful planning helps to stay on schedule and that involving residents at an early stage and multidisciplinary cooperation lead to better results.

The City of Tampere's governance model for nature-based solutions (NBS) is based on extensive cross-administrative cooperation. Responsibilities are divided among different units. The activities are guided by EU directives, national legislation, and the city's own strategies and guidelines, such as the stormwater program, the Tampere carbon neutral roadmap, and the biodiversity program. Residents and stakeholders are normally involved in official consultations. More interactive co-creation is done in EU projects, where project-specific workshops and volunteer events are organised.

1. Introduction of the pilot site

The Tampere pilot site for the City Blues project, Varsanpuisto, is a park located in the Vuohenoja stream valley about 5 km from the city center in Takahuhti district. The area is mainly bordered by detached houses and serves as a local recreation area for residents and a space for urban farming. It has been assessed as a regionally significant open landscape area.

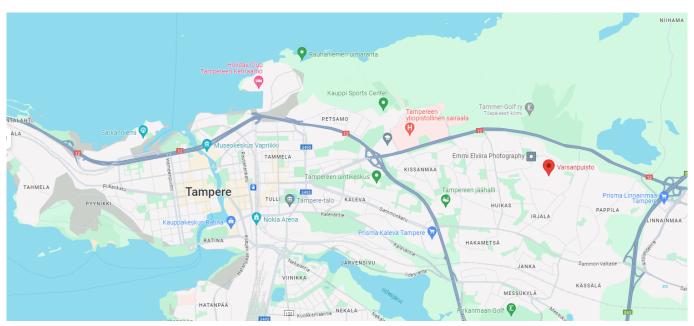


Figure 1. The site location Varsanpuisto marked with red sign (Source: maps.app.goo.gl/7TFJmJpjLtAmSNRu7)

Flooding has been observed along the Vuohenoja stream in Kissanmaa and lidesranta districts. To prevent flooding, alluvial meadows were planned in the area.

The area is a popular outdoor recreation area where, for example, children ride sledges and do cross country skiing in winter. Outdoor trails are used for cycling, walking, and jogging. The planning area included an urban gardening area that had suffered from drainage problems.

The vegetation is typical of the area and there are no trees of landscape value or rare or protected plant species.

Brown trout have been introduced in the Vuohenoja stream to support their habitat and reproduction. Trout are highly endangered in Finland, so it is imperative to take them into account in the design. The project should support trout reintroduction by taking into account fish passage in riverbed structures.

Several invasive alien species were found in the pilot area. They included Garden lupin, Himalayan balsam, Giant hogweed, Canadian waterweed, Spanish slug, and Signal crayfish.

2. Planning of the pilot

1.1 General planning

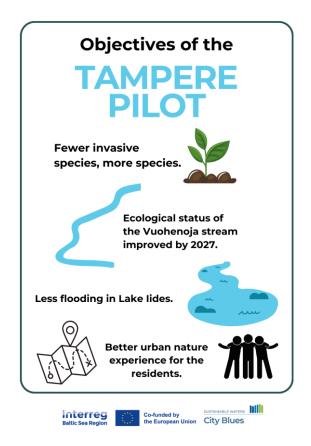
Design starting points

The primary objective of the pilot was to prevent flooding and improve stormwater management near Lake lides and in Vuohenoja stream.

The objectives of the pilot and starting points of the design process were to

- Reduce flooding in the area near Lake lides.
- Improve the ecological status and water quality of the Vuohenoja stream and Lake lides.
- Prepare for increasing water volumes due to climate change and changes in land use in the upstream area.
- Increase biodiversity.
- Combat invasive alien species.
- Improve the recreational value of the area.

The aim was also to take cultural history of the area into account, and to keep the landscape open in the park. We had to keep the retention volume of the solution as high as possible. To adapt to the changing climate, we need to use a greater diversity of species in developed areas.



Design process and timeline

The general planning phase began in early March after the order was placed. This was preceded by tender negotiations between the City of Tampere and AFRY Finland in January, during which the area and the starting points for the planning were reviewed. It was agreed that the preliminary study would set retention volumes as a target and that these should be achieved without extensive tree felling.

Modelling was also purchased from the design company. The aim was to find out what kind of impact the construction of the pilot would have.

A nature survey and preliminary study had already been carried out in the area the year before, which made it easier to get started. In addition to these, other necessary materials were provided to the designers at the start of the general planning. They included, for example:

- Base map
- Network maps (water supply, cables, etc.)
- Zoning plan
- Laser scanning data
- Measurement data from a flow measurement point near the planning area
- Map data on city-owned land in the planning area

During the general planning, terrain measurements were done according to the measurement plan and the condition of the old culverts in the area was checked. Field visits were also carried out.

The kick-off meeting was held on March 5, 2025. The planning team included professionals from a consulting firm *AFRY Finland* specializing in stormwater management, landscape design, geological planning, and traffic planning. In addition, an expert on biodiversity in the NGO *Wild Zone* participated. Special expertise was also obtained from *KVVY* in relation to fish and riverbed restoration. The city was represented in the planning by a landscape designer, a geological planner, a traffic planner, a tree expert, an environmental protection expert, a green space maintenance expert, and a project manager. The developer of the site was informed of the upcoming project well in advance.

On March 19, 2024, we organized a resident workshop at the Irjala daycare center, where we presented preliminary ideas for the design of the site and asked for feedback. The feedback and ideas received from the workshop were collected in written form and on a map, reviewed and considered during the planning process.

The general plan was available for public comment in May 2024, after which the feedback was reviewed by the planning team. The feedback concerned, among other things, trees, drainage problems in cultivation plots, flooding and the condition of culverts, the expansion of the pond, ski trails, rubbish bins and benches. Most comments were positive or neutral.

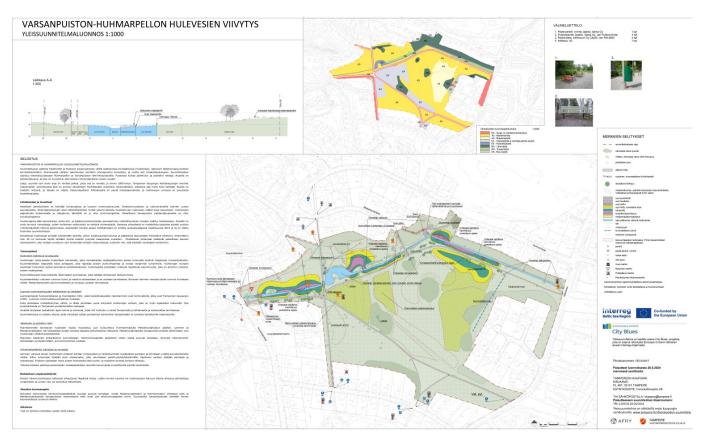


Figure 2. General plan of Tampere pilot.

The general plan was not changed because of the feedback, but it was taken into consideration in detailed planning. The general planning phase ended when the community board approved the general plan at its meeting on June 11, 2025.

More details on stakeholder engagement can be found in Chapter 3.

Challenges and solutions

Challenge	Solution
New structure, circulation pond requires machine maintenance but there was no road nearby.	A new maintenance road was built, which also serves as a route for residents and other users.
It can be challenging to get all the relevant experts to comment in time if comments are needed urgently.	Identify commenting needs before starting the design process. Plan commenting process well and reserve time in the calendars.

KPI's

- The general plan will be completed within the specified time frame.
- The objectives and feedback received have been considered in the plan.

1.2 Detailed planning / Construction design

Design starting points

The general plan and the materials and input gained during the planning was used as the basis for the detailed planning. The same consultant company continued with the work.

The general objectives of the design were the same as those of the general planning. The construction design refined the plans. Modelling was utilised, for example, to ensure sufficient retention capacity.

Design process and timeline

Construction planning took place between June and September 2024. Modelling results were finished in June and the modelling process started already during general planning. The plans were finalised in the beginning of October.

We had to request a statement from the Pirkanmaa Centre for Economic Development, Transport and the Environment regarding the possible need for water permits or other permits or notifications for the planned work. The detailed plans were sent to the authority for comments 7 October, 2024. The statement was received on December 31, 2024, and according to it, there was no need for a water permit.

Challenges and solutions

Challenge	Solution
Several alien invasive species were found in the area.	We organised a separate site visit and several meetings attended by professionals in the field. In the guidelines for the construction phase, special attention was paid to ensuring that vegetation was suppressed and prevented from spreading.
Canadian waterweed was found in the stream, and it spreads easily if the waterway is dredged.	Vegetation can be removed well before the start of the construction work or left in place. A silt curtain downstream prevents spreading.
The eradication of harmful invasive species required the removal of soil masses. If all the masses are removed from the area, this will generate emissions and costs.	We used encapsulation technology, which allows for better utilisation of soil masses in the area.
A new NBS, a circulation pond, was designed for the site. As there was no previous experience of this, its design increased the time required and raised costs. This could have been identified earlier.	Set aside time for unexpected expenses. Alternatively, remove something from your plan if you add a new element to it, if you want to ensure that your schedule and costs do not increase.
There were several rounds of comments, which took time but improved the result.	Identify commenting needs before starting the design process. Set aside sufficient time and money for commenting and interaction already at the start of the project.
Some comments were not received simultaneously but arrived too late and the requirements expanded during commenting. As a result, the overall costs increase.	If it is possible to agree on a commenting schedule in advance, time can be reserved for it in the professionals' calendars well in advance. Ideally, professionals have colleagues, and no topic is dependent on a single person.
Discrepancies were found in the field measurements, and they had to be verified on site.	The measurement programs must be specified and instructed in sufficient detail to ensure that the correct measurements are obtained.

KPI's

• The construction design is completed within the specified time frame.

1.3 Lessons learned

- During the modelling phase, it was noted that more weather stations are needed to obtain
 relevant source data on rainfall events from different parts of the city. Tampere plans to acquire
 a few more stations for western and eastern Tampere, in addition to the one it already has in the
 city center.
- Organising a resident workshop before the general plan is made public is an effective way to
 gather tacit knowledge for the planning process and improve the user-centredness of the final
 result. It also reduces the amount of feedback received during the official consultation process.
- The schedule is affected by factors such as the size of the site and the scope of the themes (e.g., stormwater management alongside invasive species and traffic signs) and whether the design company already has previous experience of similar projects. In this pilot, measures to combat invasive species, such as encapsulation, were a new issue for the consultants, which required familiarisation with the subject and time.
- If large amounts of excavated soil are generated at the site, it would be useful to model them. In this case, the excavations were modeled, but the fills were not.
- It is advisable to leave room for surprises in the planning schedule.
- The sites are always unique, each with their own specific challenges, and the work is shaped accordingly.
- The more diverse the group of experts involved in the work, the better the end result.
- The information sign should be prepared carefully, and time should be set aside for inspection rounds. The information sign can be used to explain to residents why nature-based solutions are being implemented and what their benefits are.
- A shared workspace facilitates collaboration and information management between multiple organisations.

3. Construction phase

Starting points

Tampereen Infra, a subsidiary of the city, was responsible for the construction of the site. The City of Tampere acted as the developer. An external supervisor was used at the construction site. Several projects are built with Tampereen Infra every year, so the city is familiar with their operating methods. The construction plan documents were delivered to them via an electronic system.

In terms of construction technique, the project was not particularly challenging. For example, piling was not needed. What was special about this site was its size and the encapsulation of invasive species. Such large quantities have not been encapsulated in Tampere before. Invasive alien species were removed during construction, and invasive soils were either removed or encapsulated and covered with clean soil. At the time of writing this report, we do not yet know how successful the elimination was.

Some of the measures for eradicating invasive alien species are challenging to implement. If, for example, a vehicle tire washing station is required at the site, it is a major undertaking. This was not required at this site.

In addition, the circulation pond was a new structure in Tampere, so it was unclear how it should be implemented to function as planned. It remains to be seen whether the dimensions were correct and whether enough water is directed there. It was already discovered that a base stone needs to be added to direct the water into the pond.

To enhance biodiversity, we used a wide variety of species and seeds and seedlings from local plants. The trees were noble deciduous trees that tolerate also drought. Trees that were cut down were left on the site to decay, as decaying wood also contributes to biodiversity.

Challenges and solutions

Challenge	Solution
Initially, there were challenges in getting construction underway, as price negotiations took time.	Allow extra time for surprises in the procurement. Make sure you provide the contractor with sufficiently detailed information so that the assignment is as clear and unambiguous as possible and easy to price correctly.
Temporary turbidity was observed in measurements downstream despite the use of a silt curtain.	Another silt curtain was installed at the site.
Construction had to be carried out during the frozen ground period, but detecting invasive species in winter was challenging.	Be prepared to combat invasive species appropriately even after the site has been completed. An excavator can also be used with a machine control model, which helps remove invasive species from areas marked in the plan.
Canadian waterweed was found in the stream, and it spreads easily if the waterway is dredged.	Vegetation can be removed well before the start of the construction work or left in place. A silt curtain downstream prevents spreading.

Timeline

The contractor was given permission to start preparatory work on the site on January 20, 2025. For example, the light traffic lane was widened for site traffic. The access road to the field was completed in early February.

The procurement order was completed at the end of February, so the construction site officially started on March 3. The site was completed approximately two weeks ahead of schedule on June 3. The official acceptance and handover of the site for maintenance took place during a site visit on June 23. After that the final financial statement was prepared in August.

Lessons learned

- Permit process and procurement can take time. Make sure there is enough flexibility in the schedule.
- The season poses its own challenges for the construction schedule. For example, excavation work is best done when the ground is frozen, but on the other hand, the ground can't be frozen during the finishing stages.
- It is important that supervisors are on site every day to resolve any issues so that work on the site does not slow down.
- All machinery and equipment must be suitable for the site.
- It is beneficial if the construction company has previous experience of similar work.
- The quality of the design phase documents is tested during construction. The plan and the rasterisation of different areas must also be readable in black and white and machine-readable (excavation software uses them).
- In practice, it is almost always necessary to modify plans slightly during construction. At the pilot site, the dam does not fully comply with the construction plan, but it is similar to it.
- The success of establishing a meadow can only be assessed years after the construction phase.
- The monitor and developer must keep each other informed; communication is important from the construction site to the supervisor/builder and vice versa.

KPI's

- The construction is completed on schedule.
- The works have been implemented in accordance with the plan and/or agreement.
- Work safety is well implemented at the site.
- Resident feedback during construction.

4. Citizen and stakeholder engagement

The **planning and design process** of the pilot was done in collaboration with different stakeholders. We managed to reach relevant stakeholders, and they took part in the process. The co-creation process has involved stakeholder engagement with:

- Residents
- Local resident and private housing associations
- City Blues associated organisations: Wild Zone, Sospro, KVVY
- 4H association (they rent plots of land for farming in the area) and urban farmers
- From the City of Tampere, stormwater experts, invasive species expert, landscape designer, tree
 expert, geology expert, traffic planner, constructor/developer and green area management
 expert
- From the planning company AFRY Finland, stormwater expert, landscape architect, traffic planner, modelling expert
- Tampere Water Utility (Tampereen Vesi Oy)
- Centre for Economic Development, Transport and the Environment in Pirkanmaa (statement for a need of a water permit)

We held several meetings throughout the planning and design phase with a diverse group of professionals from different design fields. We usually managed to get the experts to attend, but it was sometimes challenging to find meeting times that suited everyone in such a large group. It would be good if meetings could be scheduled well in advance and if people could be committed to attending.

We organised a **residents' workshop** 19 March 2024 to share and get feedback on the plans, as well as new local knowledge and empirical information to support planning. In the workshop, we gathered views on all the things that should be considered when designing the site.



Figure 3. Example of a map of the planning area on which participants collected comments.

Below are some remarks from the residents and how we took the feedback into consideration.

- The residents wanted more benches and trash bins in the area. These were realised.
- They also wanted a sign explaining about the nature in the area. An information sign was planned and set up. It provides information on flood meadows, brown trout and adding biodiversity in the area, for example.
- Residents wanted to see beautiful and colorful flowers like yellow irises and marsh marigold, and local species suitable for butterflies and pollinators. These were taken into account.
- There was a desire to improve conditions for birds, and the new wetlands will meet this need.
- Efforts will be made to improve the moisture problems mentioned by residents, for example by replacing drums and repairing ditches.
- The sledding hill will be raised, and the soil will be piled up to create an even better sledding hill. Trees will be planted at the request of residents so that they do not obstruct or endanger sledding.

Comments were sorted into categories: general comments, stormwater, landscape/nature, mobility, landfill and requested items to be added such as benches/dumpsters. The comments were discussed later between the area planners and city representatives. At the meeting, it was agreed which comments would be taken into account as such, which would be taken forward to other city units, which comments could not be taken into account or implemented, and the reasons for doing so. The results of the workshop formed a good starting point for further planning.















Figure 4. Photos from the residents' workshop.

The event was advertised well in advance in social media, on web pages and in public libraries, for instance. All in all, 29 people attended, including the organisers and speakers. Some of the participants represented, for example, a residents' association. We were pleased with the number of participants and their active involvement.

Residents were also involved in the **construction phase**. In 2025 we organized three voluntary planting events and one volunteer event, where we built spawning beds for brown trout in the lower reaches of the Vuohenoja stream. Providing opportunities for volunteering also supports social cohesion. We had around 20 people participating in planting events and about 25 people in the river restauration event.



Figure 5. Photos from the voluntary work event for the residents. New spawning beds for brown trout were introduced.

In **maintenance phase** we use citizen science approach to test how we could use residents in informing us when the NBS is not functioning as it should. At the beginning of October 2025, we placed two signs near NBS structures. One sign is in Varsanpuisto by the bottom dam and asks people to contact the city if the dam becomes blocked. Another sign is located next to a stormwater basin in another part of town. It asks people to fill out a survey if they notice that the basin is not working properly. We will add information on the results of these monitoring activities when we update the report during spring 2026.



Figure 6. Information sign next to the bottom dam in Varsanpuisto.

Lessons learned

- A comprehensive plan to involve stakeholders could make the work more thorough. Now it was
 done case by case.
- A resident workshop at the beginning of the general planning process provides useful information for designers.
- It is a good idea to collect feedback from residents on a map so that comments can be placed in the right location.
- The structure and interaction of the workshop should be carefully planned to support collaboration and keep the schedule on track.
- Marketing is needed and it takes time to do it properly. We could have allocated more time to marketing in order to take advantage of different communication channels. For the first volunteer work sessions, we had more time and got more participants.
- Associations and NGOs can spread information effectively because they often have many good contacts from previous works. If it is possible to collaborate with them, that helps.
- The construction of NBS sites is viewed positively, provided that it does not compromise services, for example.

KPI's

- Number of participants in the events
- Feedback received on events and meetings
- Feedback received while general plan is open for public
- Quality of the final plans

5. Risk management

We didn't have a risk management plan for the Tampere pilot but risk assessment for the City Blues project was executed. As part of the Tampere pilot planning process, a statutory **safety risk assessment** was carried out. The contractor drew up a safety plan for the construction site based on the assessment.

Different risks were identified during the pilot. However, no detailed action plan was drawn up for them. Every effort was made dyring planning phase to prevent the identified risks from materialising.

One example is the risk of spreading invasive alien species during construction phase unintentionally and making the situation even worse than it was before the pilot. Preventing the spread of invasive species was taken into account in the planning and implementation. A separate field trip was conducted during the planning phase to assess invasive species to prevent the risk from occurring.

Risks were also identified in relation to planting flood meadows. If the meadows are not planted immediately after excavation, there is a risk that water rising in clay-based farmland may erode the soil and wash material into the water, clouding it. In addition, weeds may start to grow in the exposed soil.

Ideally, planting should be done as soon as possible after excavation work, but in this case, the site was completed in June, which was not the optimal time for planting. In the spring, the soil was dry and hard. Some planting was done in May, but most of the planting and sowing is done in the autumn.

Lessons learned

In the future, it could be useful to draw up a plan for similar NBS design and implementation projects before kick-off, which could include a risk assessment. Risks should be reviewed at different stages of the project and the assessment should be updated. This would ensure that risks are better prepared for if they materialise.

6. Maintenance, monitoring, and retirement plans

Performance monitoring of NBS in Tampere

In general, nature-based solutions in Tampere are monitored through continuous measurements and individual sampling. Various studies are also conducted as needed. Studies of long-term performance of NBS have not yet been conducted and the city doesn't have experience in NBS retirement yet.

- Online sensors: water flow, pH, turbidity, conductivity, NO3-N, COD, temperature, precipitation
- Traditional sampling: Cl, SO4, Ptot, Ntot, TSS, metals, fecal coliforms etc.
- Biodiversity studies, CO2 calculations, surveys, electrofishing etc.

There are also continuous measuring stations and sensors near Varsanpuisto, and the performance will be analysed using those. The flow of the Vuohenoja stream is automatically monitored from 1/2023 onwards.

Maintenance of the pilot area

The retirement of the solution was not considered specifically during planning as they are planned to function several years. The purpose of maintaining the site is to ensure that it continues to function as intended in the future.

For this reason, the planning company created a maintenance card for the site, which includes a description of the maintenance measures that need to be carried out in the park and on the structures of NBS. The card also includes a map showing the maintenance categories for different areas. The contractor responsible for the site can easily see from the card what measures need to be taken in the area.

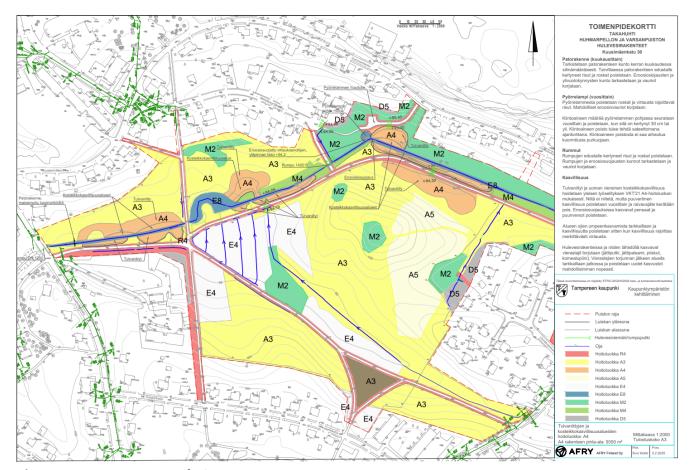


Figure 7. Maintenance card of the pilot area.

Monitoring during City Blues in Tampere

Actual monitoring of the new NBS site takes time, and unfortunately it was not possible to monitor Varsanpuisto flood meadows performance during the project lifecycle. However, continuous measurements and water samples are used to assess the impact of the construction on the waterways. These are examined in a thesis currently in progress, which is scheduled for completion by the end of 2025.

Furthermore, in Tampere we use citizen science approach to test how we could use residents in informing us when the NBS is not functioning as it should. At the beginning of October 2025, we placed two signs near NBS structures. One sign is located in Varsanpuisto by the bottom dam and asks people to contact the city if the dam becomes blocked (see fig. 6).

Another sign is located next to a stormwater basin in another part of town. It asks people to fill out a survey if they notice that the basin is not working properly.

We will add information on the results of these monitoring activities when we update the report in spring 2026.

7. Pilot investments

Costs

The total investment cost of the pilot was 590 127,92

- General and detailed planning and modelling 55 189,17 €
- Plant production: Collecting, growing and planting local seedlings and seeds 46 600,00 € (The work is still ongoing, so the cost is the amount quoted at the tender stage and may differ from the actual cost.)
- Construction materials and work 488 338,75 €

All prices include 0% VAT.

Other related costs

- Organising resident events: serving costs for 3 events about 700 € (in some cases, the service provider partner paid the catering costs)
- Information signs for monitoring 900 €

Funding

The City Blues pilot was partly financed by European Union through Interreg Baltic Sea Region program. In total, 40 000 euros is reserved for planning of NBS and 175 000 euros for construction of NBS. In addition, the salary of the project manager and serving costs of the resident event and voluntary work events were funded by the project.

Rest of the funding came from the city: For green areas development the money came from city's budget financed by city tax. For stormwater management the money came from stormwater fee collected by the City of Tampere. Stormwater fee is earmarked for storm water management: planning, implementation, maintenance and monitoring.

KPI's

We assess the success of the investment

- by monitoring the effectiveness of the solution in terms of water quality and quantity and by ensuring that the solution achieves the anticipated delay targets in particular
- by monitoring fish stocks, i.e. whether we have succeeded in securing their living and breeding opportunities
- by monitoring whether invasive alien species return to the area

8. Governance model of NBS in Tampere

Responsibilities

The green areas and stormwaters unit is responsible for nature-based stormwater solutions in Tampere, but cross-departmental collaboration is relevant in stormwater management. Responsibilities of different units is described in the table.

City unit	Responsibilities
Green areas and stormwaters unit	Stormwater management, detailed stormwater plans, performance monitoring
Climate and environmental policy unit	Coordination of climate work & international collaborations
City planning unit	Generic stormwater plans, retention requirements and area reservations for NBS, producing blue-green infrastructure data and developing spatial data
Construction unit	NBS implementation in public areas
Construction control unit	Approves property-specific stormwater plans
Environmental protection unit	Species protection & prevention of water pollution
Tampereen Infra	Building of NBS and other stormwater solutions, maintenance of parks and NBS
Tampere Water (water utility company)	Maintenance of NBS
Resque department	Preparedness & acute crisis management

Legislation

The promotion of nature-based solutions in Finland is based on the EU Water Framework Directive and Restoration Regulation, as well as national legislation and guidelines. Stormwater management is addressed in numerous Finnish laws. The most important of these for the city are

- the Land Use and Building Act (132/1999),
- the Water Services Act (119/2001),
- the Water Act (587/2011),
- the Flood Risk Management Act (620/2010),
- the Environmental Protection Act (527/2014),
- the Water Resources Management and Marine Management Act (1299/2004),
- the Nature Conservation Act (1096/1996),
- Act on the Maintenance and Cleaning of Streets and Certain Public Areas (669/1978).

In addition, the Association of Finnish Local and Regional Authorities' stormwater guide serves as guidance at the national level.

There is strong commitment to manage stormwater primarily with NBS in Tampere. The city has following strategies and guidelines in use to support the use of NBS:

- City strategy
- Mayor program
- Carbon neutral Tampere roadmap
- Biodiversity program
- Stormwater program
- Catchment-scale stormwater master plans
- NBS design quidelines
- Rain garden guidelines for residents
- Construction site runoff guidelines

Most important is stormwater program which outlines the principles for stormwater management. It outlines that nature-based solutions are a priority, and last option is grey infrastructure.

The main responsibility for enforcing regulations concerning stormwater management lies with a multi-member municipal body, which in Tampere is the Environment and Building Division operating under the Community Board.

Involving residents and other stakeholders

The residents have a possibility to comment on master plans, zoning plans and park and stormwater plans when they are open for public hearing. Deeper co-creation is done in projects like City Blues where there are more resources.

Other stakeholders are involved in many phases of NBS from financing to planning and construction and monitoring and maintenance. They include external financiers, construction companies, infrastructure companies, design and consulting firms, NGOs among others.

KPI's

To assess the success of our governance model we collect information regularly for our climate budgeting, biodiversity program and environmental financial statement. Feedback from residents is collected, even if it is not analysed.

KPI's

• Number of NBS sites built

9. List of references

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