



**Stockholms stad**

**NATURE**  
Nature Assessment Tool  
for Urban and Rural Environments

**NATURE Tool Case Study Report for**

# Royal Seaport Stockholm, Sweden

Project Type	<b>Flagship brownfield development</b>	Assessment Scope	<b>Change</b>
Project Location	<b>Stockholm, Sweden</b>	Assessment Type	<b>Basic</b>
Assessment By	<b>WSP &amp; Stockholm Stad</b>	Assessment Status	<b>Retrospective</b>
Date	<b>July, 2021</b>	Tool Version	<b>1.0 BETA</b>

The Royal Seaport is a 256 ha flagship mixed-use brownfield development project led by the City of Stockholm. It is the largest urban development project in Sweden with plans for delivering 12,000 homes and 35,000 workplaces between 2011 and 2030. The assessment was undertaken as part of the wider international case testing of the NATURE Tool.

Sustainability was embedded at the heart of the project, with natural capital having an important role in its design. A key consideration is the proximity to the neighbouring Royal National City Park, a green wedge forming a ecological corridor into the urban development. The project impact on natural capital was previously assessed with the Swedish Green Area Factor tool. The NATURE Tool allowed for a more holistic and wider assessment of the benefits the sites habitats provide. The developments sustainability report included goals for the Royal Seaport. These were translated into NATURE Tool as priorities against which the project was assessed. Overall the results showed substantial gains in ecosystem services, including several gold and silver achievements for regulating services.



**The NATURE Tool is a user-friendly tool to assess the impact of land-use and management changes on natural capital performance at the project scale – because what get’s measured get’s managed**

NATURE Tool Development Led By



Ecosystems Knowledge Network

In Collaboration With



**Northumbria University**  
NEWCASTLE

Co-funded by

**Innovate UK**

Co-Developed Together with a Broad Partnership of Organisations Involved in the Build Environment

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### Case Study Introduction

The project is a mixed-use brownfield development located in Stockholm, Sweden. The development includes: housing, workspaces, amenity areas and education institutions. The project is the biggest development project in Sweden, and when complete in 2030 will create a new area of the city, which connects to one of the cities green wedges. The project will be delivered in multiple phases, with some areas already complete, and others still in the development pipeline. The NATURE Tool assessment was done retrospectively on two of the completed areas: Norra 1 & 2. The project showcases a sustainable vision for development in the capital city.

### Reason for Using the NATURE Tool

The NATURE Tool assessment was carried out as part of the international testing phase of the tool development, with an aim to better understand its international applicability and transferability. When the City of Stockholm were approached as a case study partner, they were interested in quantifying the changes in ecosystem services provision, and how the tool differed from their Green Area Factor tool assessment which had been undertaken previously.

Due to using the NATURE Tool outside its intended geographical region (United Kingdom) a basic assessment was undertaken, which eliminated the need to acquire comparable datasets for an advanced assessment. All ecosystem services were assessed and the development sustainability targets were converted into corresponding ecosystem services priorities to represent natural capital objectives of the project.

An additional challenge with applying the tool in the Swedish context was the conversion of Swedish Biotopes to the UK habitat categories used by the NATURE Tool. This was in part because there was a language barrier which meant data needed translating into English. However, the Swedish biotope classification aligned well with the UK habitat classification. Where some were hard to convert, local knowledge was sought.

### Findings & Outcomes

The results showed environmental gains in all groups (cultural & health, regulating & supporting, and provisioning) which was not surprising given it was a brownfield development with sustainability as guiding principle.

The results were especially positive for cultural and health benefits with an overall increase of 76%. The regulating & supporting benefits also achieved 'gold status'.

However, one area with reduced benefit was wood production. This was not surprising given the site previously had a small mixed woodland, which was removed. However, as an urban mixed-use development, wood production is less a priority for the area, as reflected in the prioritisation of benefits in the assessment.

This was a retrospective assessment which did not influence the design of the site. However, results were presented to Stockholm's Nature-Based Solutions Working Group where they were well received. The clients were very impressed with the visual outputs as it allowed them to easily understand the natural capital benefits provided by the site, and how these differed between categories. Perhaps more importantly, it showed the applicability of the tool outside the UK. However, the results come with a caveat - certain tool elements may need tailoring for the Swedish context, for example aesthetic values for habitat types may differ in Sweden.

*"We were offered the opportunity to test the NATURE Tool post development for some previously developed sites in the Stockholm Royal Seaport, a flagship sustainability development project in The City of Stockholm. The city has a mandatory use of a Green Space Index (GSI) to measure the provision and quality of ecosystem services created on-site in new development projects. As many functions need to be coordinated in limited same areas, there is a great need for effective tools and methods for evaluating, strengthening and integrating urban ecosystem services in urban development to ensure that various green and blue functions are met. We believe that NATURE Tool can be a helpful tool to further investigate." - Peter Wiborn - Senior Project Manager, Ecosystem Services, City of Stockholm*



### Next Steps

The assessment provided a good baseline for its compatibility and transferability in Sweden. Further opportunities are being explored for its use in Sweden and the wider Nordics.

### Acknowledgements

The assessment was carried out in collaboration with Stockholm Stad (City of Stockholm) & WSP Sweden. The assessment was possible thanks to biotope data provided by Stockholm Stad and Stockholm University.

### Experience & Feedback

The tool work well in its ability to quantify environmental net gains from the development. Challenges related to the acquisition and conversion of international habitat data to that of the UK habitat classifications were overcome. This was aided by using photographs of the vegetation and advise for local stakeholders.

### About the NATURE Tool

The NATURE Tool was first released in July 2021. For more information and for downloading the tool visit [NATURE-Tool.com](http://NATURE-Tool.com). For enquiries please contact the tool developers

