



Developing Visions & Scenario Storylines

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Skarpnäck Case Study

- Location: Southern suburb of Stockholm, built in the 1980s. Dominated by residential buildings with diverse roof angles, balcony placements, and window proportions.
- Population: Approximately 40,000
- Region Configuration: 9 districts, including Hammarbyhöjden, Björkhage, Enskededalen, Kärrtorp, Bagarmossen, Skarpnäck Gård, Flaten, Orhem, and Skrubba.
- The Northern part, close to Stockholm, is highly urbanized, while the Southern part consists mostly of lake areas and nature reserves.



The Four Societal & Environmental Challenges

Urban Heat Island Effect

- Cause: High-density housing, concrete, and asphalt usage, loss of vegetation.
- Impact: Increased temperatures, higher energy demands, health issues.
- Solutions: Increase green roofs, tree canopies, and use lighter-colored materials.

Biodiversity Loss

- Cause: Urban expansion, pollution, invasive species.
- Impact: Weakened ecosystem services, increased vulnerability to pests and diseases.
- Solutions: Habitat restoration, pollution control, community conservation efforts.

Flooding Risks

- Cause: Intense rainfall, impermeable surfaces, altered waterways.
- Impact: Property damage, disruption of services, health risks.
- Solutions: Upgrade drainage, implement flood barriers, community preparedness programs.

Social Cohesion and Quality of Life

- Cause: Economic disparities, cultural differences, urban design.
- Impact: Reduced safety, health impacts, lower community resilience.
- Solutions: Community programs, inclusive urban planning, equal access to services

Guiding Statement/Objective

The guiding objective of the Crimson Vibe Tribe is to:

- Leverage nature-based solutions for a sustainable urban environment in Skarpnäck.
- Maximize ecosystem services benefits for all society members.
- Emphasize utilitarian values of nature.
- Enhance human well-being.
- Mitigate environmental risks.
- Promote equitable access to natural resources.





Urban Nature Framework

The "Nature for Society" scenario envisions a future for Skarpnäck where urban planning and development are centred around the multifaceted benefits that nature can provide to people.

Deployment of Nature-Based Solutions (NBS):

- Examples: Constructed wetlands, urban tree planting
- Purpose: Provide ecosystem services like clean air

Coastal and Riparian Zones:

- Protection: Natural defences against floods

Access to Green Spaces:

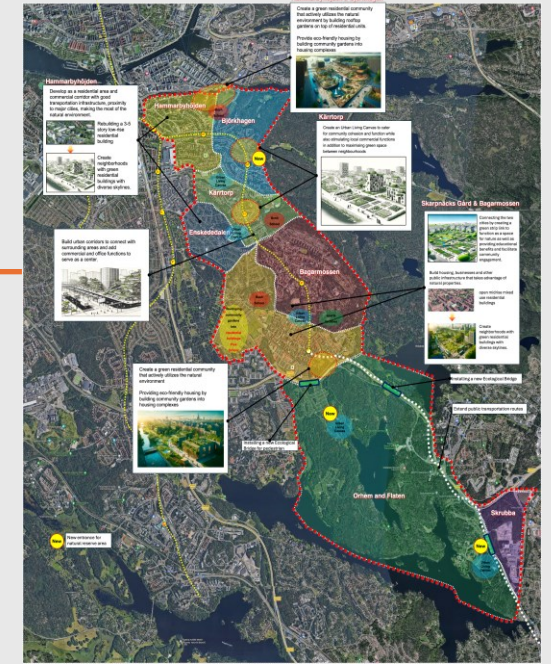
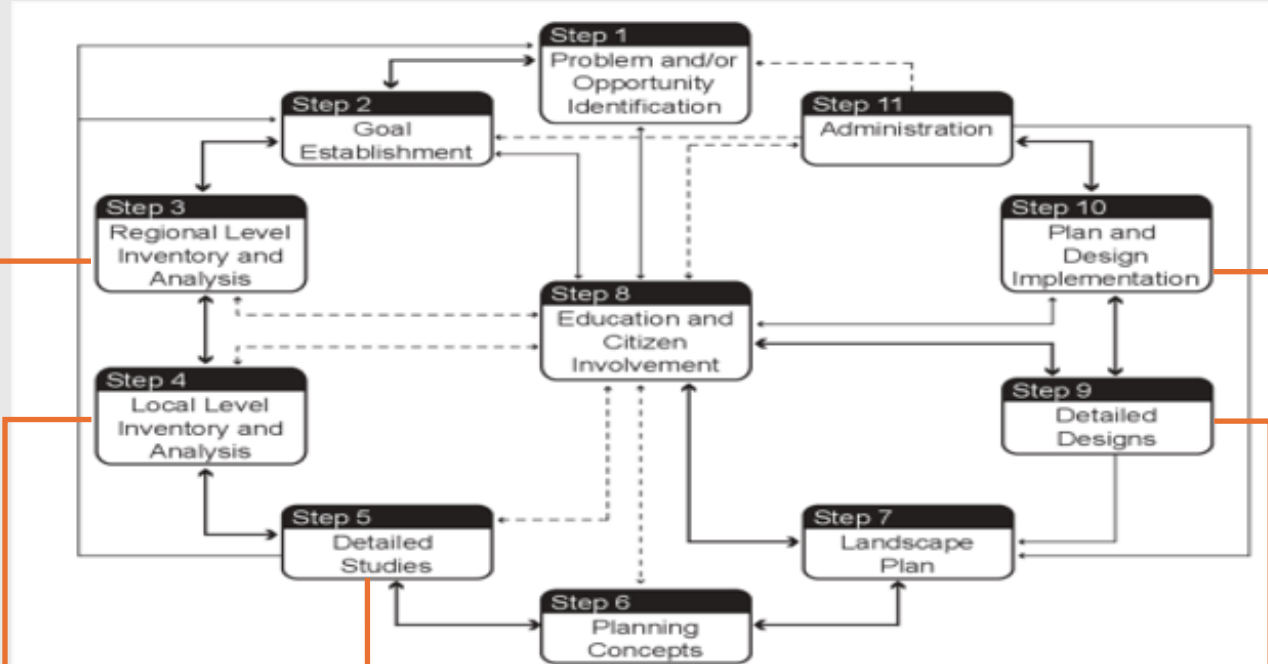
- Improvements: Pocket parks, urban green areas
- Benefits: Network of green corridors for walking, biking, riding

Promoting a Circular Economy:

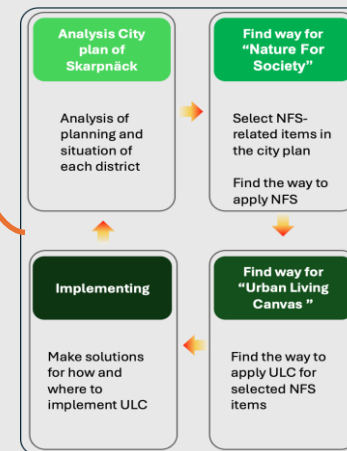
- Investments: Renewable energy, compact urban development
- Benefits: Transport efficiency, integrated mixed-use environments, walkable neighbourhoods

Ecological Planning Model

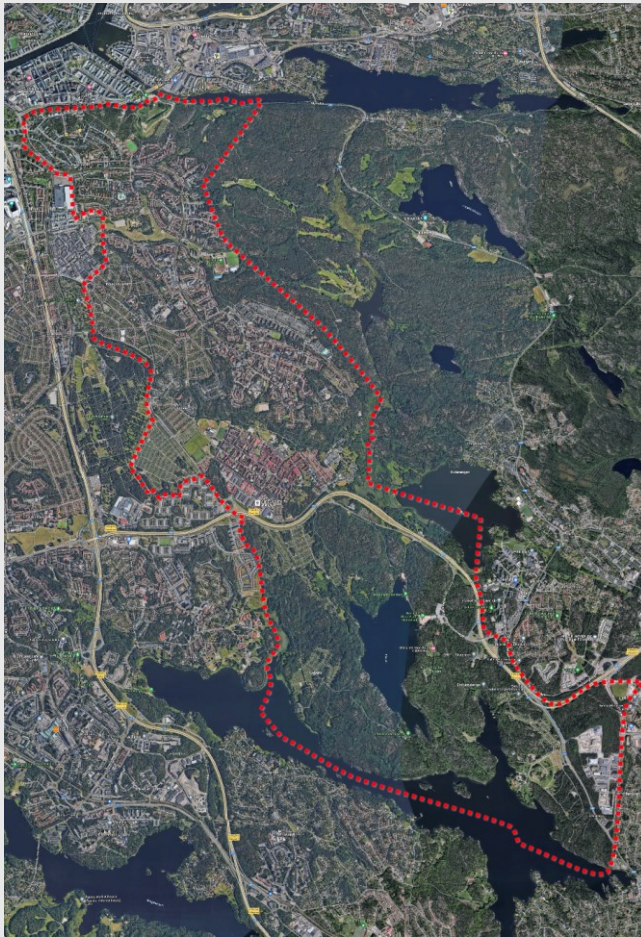
No.	District	Contents
1.	Hammarbyhöjden	Develop with new housing Overbuilding or by redeveloping the existing roads
2.	Björkhagen	Olaus Magnus Väg-Sjammansvägen corridor and the Finn Malmgrensväg-Malmisvägen corridor will strengthen
3.	Källtorp	Källtorp centre, offers some opportunities for development in terms of homes and services.
4.	Enskededalen	There is scope for a certain amount of additional building. Links to Dalen and destinations such as Källtorp centre and Nytorps Gärd should be developed
5.	Bagarmossen & Skarpnåcks Gärd	Add homes, services, businesses, more public spaces and interventions to increase safety and reassurance The central green strip between Bagarmossen and Skarpnäck will be enhanced with new activities and destinations Skarpnäck industrial area is to be developed, with more non-disruptive businesses.
6.	Orhem and Flaten	Be enhanced with more places for social contact, clearer entrances, and link.
7.	Skrubba	In the longer term, urban development could be trialed, and the area could be turned into a mixed-use development as Stockholm and Tyresö grow.



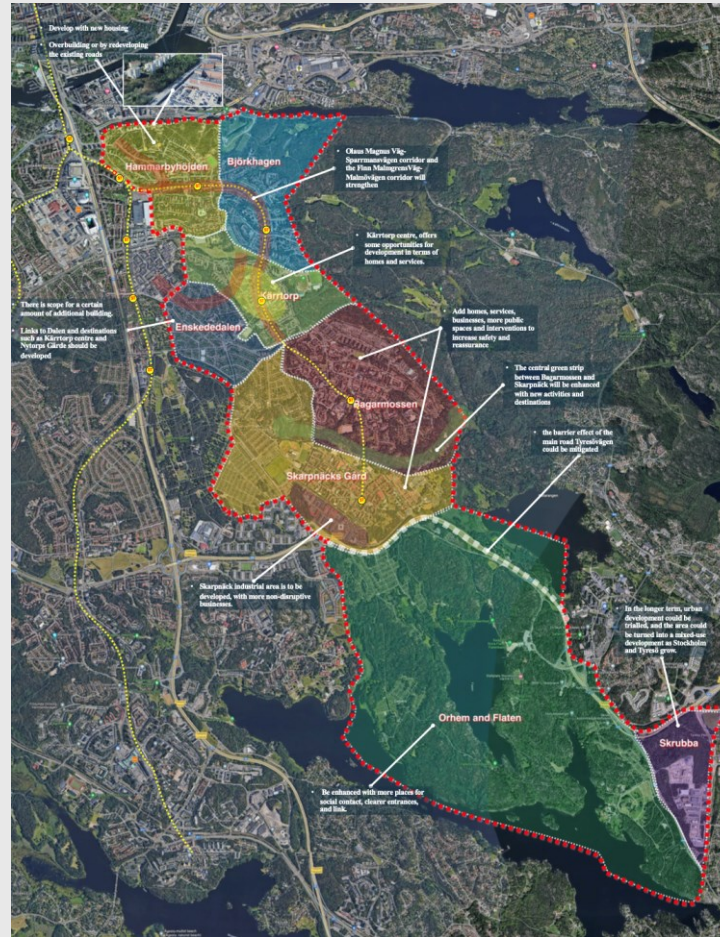
No.	District	City plan	Inventory
1.	Hammarbyhöjden	new housing Overbuilding or by redeveloping roads	Close to the existing city center, train connection, low-rise housing of 3-5 stories. Large green spaces between residential buildings.
2.	Björkhagen	Corridors strengthen	train connection, low-rise housing of 3-5 stories. Connected to natural reserve area.
3.	Källtorp	development in terms of homes, services.	train connection, low-rise housing of 3-9 stories. Many public and commercial facilities.
4.	Enskededalen	adding building. Some Links should be developed	low-rise housing of 2-3 stories. Large natural spaces.
5.	Bagarmossen & Skarpnåcks Gärd	Add homes, services, businesses, more public spaces The central green strip will be enhanced	Low-rise housing, 3-5 stories. Public transportation connectivity, proximity to nature reserve area, and high development potential. Industrial zone location. Centralized green belt allows for various community facilities.
6.	Orhem and Flaten	Be enhanced with more places	A natural environment that can be reserved and utilized at the same time.
7.	Skrubba	urban development, be turned into a mixed-use development	High potential for future development as an industrial area with connections to urban areas



Status Study & Analysis



<Satellite Image>



<City Plan>

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<Local Level Analysis>>

Nature For Society & Living Urban Canvas in Skarpnäck

Living Urban Canvases are dynamic, adaptive, mixed-use spaces that help create community identity and aid urban life through the assimilation of NBS.

Application in Urban Regeneration

- Economic revitalization through diverse events and activities

Integration of Technology and Nature

- Bio-adaptive architectural technologies

Sociocultural Relevance

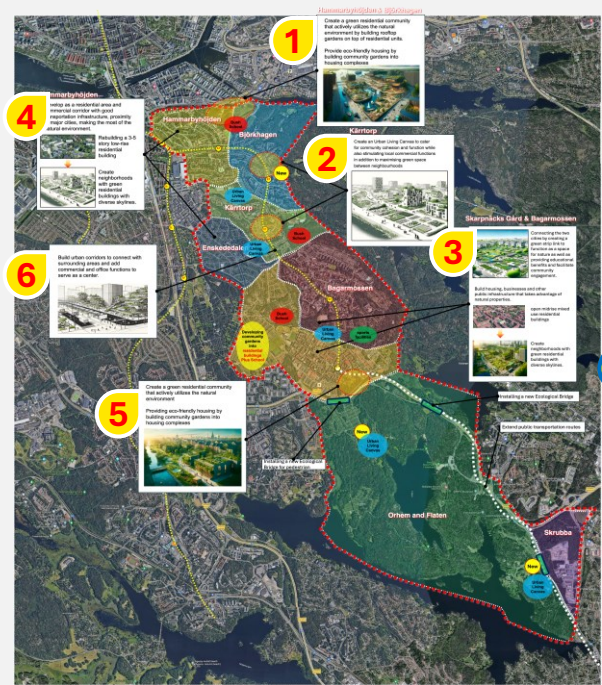
- Inclusive spaces accessible to diverse demographic groups

Policy Implications and Community Engagement

- Public-private partnerships for development and maintenance



Suggestions for Skarpnäck City Planning



- Bush School
- New
- Urban Living Canvas
- Sports Facility
- Bush School
- New entrance for natural reserve area**
- Ecological Corridor

1 Hammarbyhöjden & Björkhagen

Create a green residential community that actively utilizes the natural environment by building rooftop gardens on top of residential units.

Provide eco-friendly housing by building community gardens into housing complexes



4 Hammarbyhöjden

Develop as a residential area and commercial corridor with good transportation infrastructure, proximity to major cities, making the most of the natural environment.



Rebuilding a 3-5 story low-rise residential building



Create neighborhoods with green residential buildings with diverse skylines.

2 Kärriort

Create an Urban Living Canvas to cater for community cohesion and function while also stimulating local commercial functions in addition to maximising green space between neighbourhoods



5 Skarpnäcks Gärd

Create a green residential community that actively utilizes the natural environment

Providing eco-friendly housing by building community gardens into housing complexes



3 Skarpnäcks Gärd & Bagarmossen



Connecting the two cities by creating a green strip link to function as a space for nature as well as providing educational benefits and facilitate community engagement.

Build housing, businesses and other public infrastructure that takes advantage of natural properties.



open midrise mixed use residential buildings



Create neighborhoods with green residential buildings with diverse skylines.

6

Build urban corridors to connect with surrounding areas and add commercial and office functions to serve as a center.



A Visionary Tale of Nature for Society: Skarpnäck 2040

"In the heart of Skarpnäck, the central constructed wetland has been transformed into a vibrant community hub. The local economy thrives on circularity and sustainability. Renewable energy powers homes and businesses, while green roofs and vertical gardens reduce energy consumption. Walkable, bikeable, and neighborly streets reduce car dependence. Efficient public transport, bike-sharing, and car-sharing programs are widely used. Green spaces and parks provide a natural playground for children, a place for yoga and fitness classes, and a tranquil green oasis. Supportive mental health services and community gardens are widely used. All communities have access to green spaces and sustainable infrastructure, resulting in a healthy, inclusive environment for all residents. Sense of ownership among residents."

Summary of Nature for Society in Skarpnäck

Vision:

- Future urban planning and development centered around nature's benefits for society.

Transformation Strategy:

- Nature-Based Solutions (NBS): Strategic use of natural elements to enhance ecosystem services for society.

Key Components:

- Urban Green Spaces: Parks, community gardens, and green roofs.
- Sustainable Infrastructure: Permeable pavements, rain gardens, and natural water management systems.
- Biodiversity Enhancement: Habitat restoration, native plantings, and wildlife corridors.

Benefits:

- Human Health and Well-being: Improved air quality, reduced urban heat, and enhanced recreational spaces.
- Ecosystem Services: Enhanced pollination, water regulation, and climate moderation.
- Community Resilience: Stronger social cohesion, reduced flood risks, and increased environmental sustainability.



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