



Groen Groeit Mee Catalogue

Discussion cards for inspiration for Groen Groeit Mee, version 1.0

Design-led study by BVR / Rebel Group - December 2023



Purpose and status

This catalogue is intended as inspiration for integrated spatial planning. It provides insight into potential green-blue developments that can grow in step with urbanisation in the province of Utrecht. This catalogue provides a visual basis for dialogue and for the necessary advocacy aimed at realising the ambitions of Groen Groeit Mee (growing green space). The proposals in text and image, as well as the cost estimates, are indicative and require further elaboration with area partners.

Status: internal working document (administrative)

This design-led study was carried out by BVR consultants in collaboration with Rebel Group and representatives of the Province of Utrecht, the U10 region, the Amersfoort region, the Utrecht municipalities of Foodvalley and the Utrecht water authorities.

Concretising Groen Groeit Mee

A green and healthy development of the province requires additional investment in green space, nature, blue space and landscape, as well as the removal of barriers for cyclists and pedestrians. Groen Groeit Mee is the collaborative and driving programme established for this purpose. Its aim is to ensure that green space grows in balance with urbanisation in the province of Utrecht.

By 'green space', we mean green and blue space: nature and recreational green space, space for a healthy living environment, water and climate adaptation, space for sustainable agriculture, cultural heritage and landscape development. Allowing this to grow in step with urbanisation means enhancing the quality of the existing green-blue structure and adding new green-blue links, all woven together into a robust network – more and better.

The Groen Groeit Mee ambition was endorsed by all partners in the Groen Groeit Mee Pact of February 2022. To practise and test the Groen Groeit Mee principles, four pilot projects are currently under way: Hollandse IJssel, Kromme Rijn Linielandschap, Roode Haan and the Southern Eemvallei. The province of Utrecht has published the guidance *Handreiking Nieuwe Woongebieden* (Guidance for new residential areas) alongside the provincial environmental regulation (*Omgevingsverordening*), setting out principles for green development (balanced growth) linked to expansion areas.

In 2021, Bureau Buiten mapped the spatial task for Groen Groeit Mee. Bureau Buiten also identified the potential financing options, and in 2022 Rebel Group further developed the funding and financing strategy.

To further concretise the Groen Groeit Mee task in the province of Utrecht, the discussion cards were drawn up in 2023. This catalogue provides

insight into potential green-blue developments in the province of Utrecht. It explicitly links the green-blue task to the housing development task and gives attention to urban-rural relationships and connections. This 'grey' transition area between rural and urban tasks is an important zone in which the green task for recreation, climate, health, sustainable agriculture and nature in and around the city must be realised, linked to the agreements on housebuilding and employment locations. Groen Groeit Mee therefore focuses primarily on the green space and landscape around towns and villages, as well as the urban fringe zones, green wedges and the main green-blue network extending into built-up areas. Further elaboration of this requires choices to be made to achieve a good balance between urbanisation, Groen Groeit Mee and the principle of *Water en Bodem Sturend* (Water and Soil Leading). See also the suitability map for new residential and employment locations of the De Stichtse Rijnlanden water authority.

It is important to recognise that the discussion cards cover only part of the green-blue task in the province of Utrecht. The spatial proposal for the province of Utrecht (*Ruimtelijk Voorstel provincie Utrecht, RVpU*) and the environmental strategy of the province of Utrecht (*Omgevingsvisie provincie Utrecht, OpU*) also contain tasks and ambitions that require green-blue development now, soon and in the future. The Utrecht rural area programme (*Utrechts Programma Landelijk Gebied, UPLG*) likewise includes green-blue tasks, such as nature restoration through the realisation of *Natuur Netwerk Nederland* (Nature Network Netherlands, NNN), improvements to Birds and Habitats Directive areas, water storage and water quality measures, new forests and green-blue corridors. In addition, existing nature and recreation areas such as the *Utrechtse Heuvelrug* face a task of preservation, management, zoning and strengthening.

Purpose and status of the discussion cards

The purpose of the discussion cards is to provide all Groen Groeit Mee partners, as well as other stakeholders, with insight, awareness and inspiration regarding possible green-blue area developments, presented in the form of a 'Groen Groeit Mee Catalogue'.

These are green-blue area developments that contribute to the objectives of Groen Groeit Mee and that are simultaneously linked to other policy agendas and programmes of municipalities, water authorities, the province and the national government.

To support this, this Groen Groeit Mee Catalogue has been prepared.

Through design-led research by BVR, an initial exploration has been carried out into possible future green-blue projects linked to the urbanisation challenge of 165,000 homes (U Ned 2022, Groeien in Nabijheid), based on available documentation and visions. This has been translated into discussion cards that clearly present these potential green-blue developments. The cards contain a concise description of each green-blue development with key facts and figures, an indicative map and an inspirational image. All figures and maps are indicative and no rights may be derived from them.

The basis for the discussion cards consists of the five green values from the Groen Groeit Mee Pact:

- 1. Accessible green spaces**
Every resident should be able to access green areas with qualities that connect with their recreational wishes and needs.
- 2. Sustainable agriculture**
The agricultural sector should be profitable while also following the principles of circular agriculture and inclusion towards nature.
- 3. Resilient nature**
Nature should encompass a rich biodiversity and be resilient.
- 4. Countryside open to all**
The countryside should be lively and open to all, and contribute to distinctive heritage and culture.
- 5. Visible waters**
A robust and visible water system should contribute to healthy urban life, nature and agriculture.

In the discussion cards, the Schijf van Vijf (Wheel of Five) from the Handreiking Groen bij uitbreidingslocaties (Guidance on green space for new residential areas) (Province of Utrecht, 2024) is used to show where each development might place its emphasis. Some projects may focus more on water storage, others on health or nature values. Many green-blue developments in and around the cities are located near busy roads and railways. For both people and animals, tranquillity and quietness are essential qualities that form part of a healthy living environment. When green-blue projects are actually planned and realised, this aspect deserves special attention.

Groen Groeit Mee: quality and quantity

Groen Groeit Mee aims for the balanced and equitable growth of the green-blue network. When is this done well? In addition to quality (the five values, the Schijf van Vijf), Groen Groeit Mee also implies ensuring a sufficient quantity of green-blue space. Both the amount and the coherence (network value) of the green-blue network matter. In this design-led study, several commonly used indicators from the scientific literature have been applied:

75 m² per dwelling

Per (new) household, 75 m² of urban green space is required (this refers to directly accessible nearby green space; according to the WHO standard, at least 1 ha of green space within 300 metres of the front door) (Sources: GIOS study Groene verstedelijking (2023), WUR Groene meters (2003) and PBL (2023)). According to Wageningen University & Research, this 75 m² can be applied in urban areas up to 1000 metres outside the built-up area. Sports grounds count toward this requirement, agricultural land does not, as it is not publicly accessible. Water surfaces also do not count, although the bank zones do. This ratio aligns well with the 20–25 per cent unpaved surface and/or open water area often required by the water authority for climate adaptation.

For new housing in expansion areas, 75 m² of new green space per home is realistic, but in compact inner-city locations or densified nodes this is difficult. Sometimes, for practical reasons, this area can be divided into a part located within the plan area and a part to be added elsewhere to green structures in the city or the urban fringe. We therefore regard the 75 m² as a 'green equivalent', which can be combined with a points-based system such as those used in Malmö or The Hague. Because every situation differs, this indicator should not be applied as a strict standard. Inner-

city locations are inherently compact, and there is limited room to add green space. Through smart, site-specific design, nature-inclusive construction, the use of trees, roofs and façades as an elevated second level, and by combining structural green space, pocket parks and the preservation of existing green space, points can be earned so that the equivalent green metric – or green factor – can still be achieved.

500 m² per dwelling

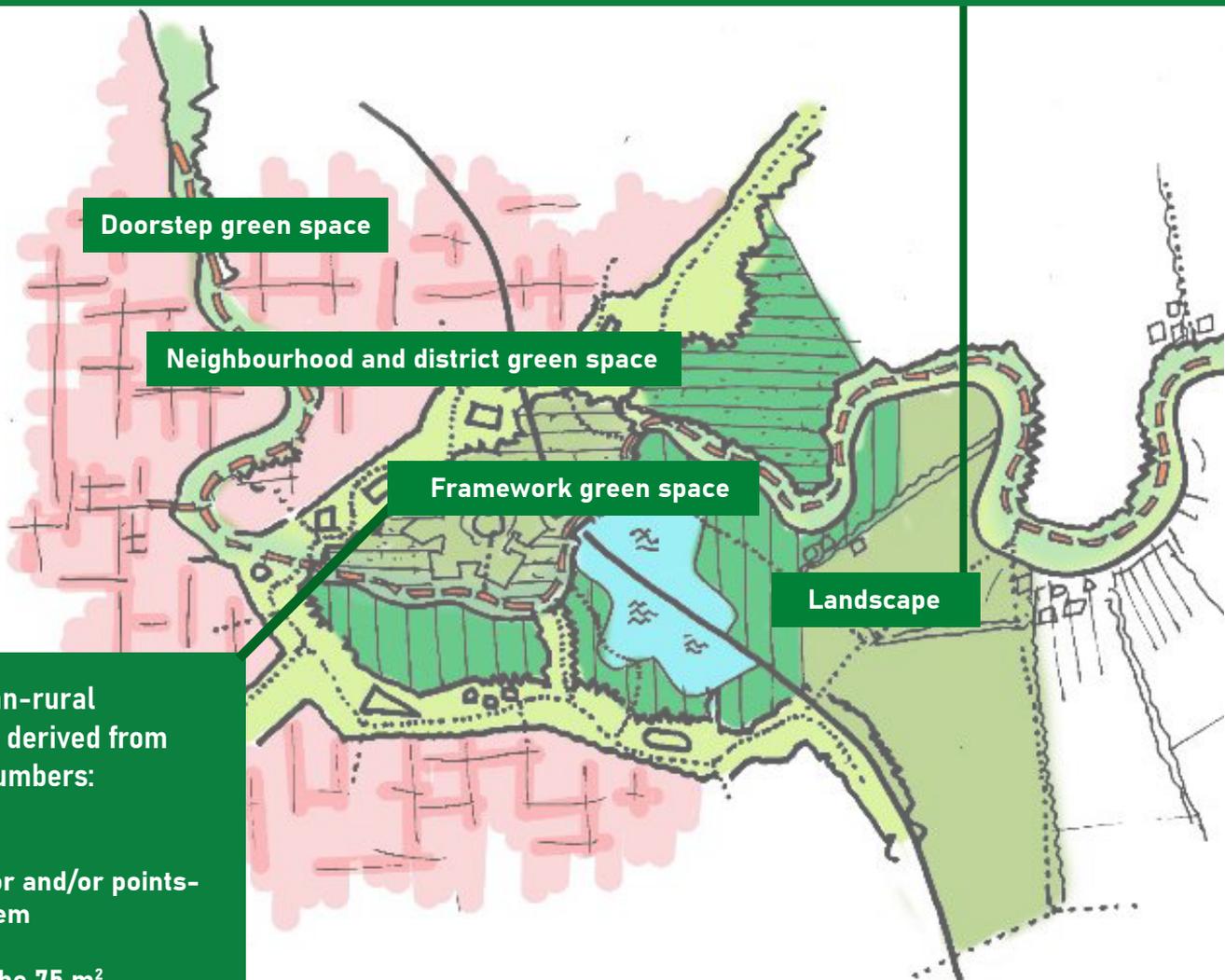
In this design-led study, we assume that new housing should also be accompanied by accessible landscape to support a healthy living environment. Per (new) household, this amounts to the equivalent of 350–500 m² (we use 500 m²) of accessible landscape suitable (or made suitable) for recreational experience. This landscape lies within 5 kilometres of the settlement, or 30 minutes by bicycle, and extends along long connecting lines up to approximately 10 kilometres (Sources: GIOS study Groene verstedelijking (2023), WUR Groene meters (2003) and PBL (2023)).

This applies to new residential areas (expansion) as well as to infill (densification). The required landscape already exists in the form of agricultural areas or forest and nature areas. The spatial demand arising from the 500 m² indicator therefore does not need to be purchased and redesigned in full. Through targeted investments in agricultural sustainability, green-blue corridors, walking routes, green-blue connections, small landscape elements, forest, nature and recreation areas, and water functions, it becomes a sustainable Groen Groeit Mee landscape that connects town and countryside as a green-blue wedge.

**Green-blue wedge
calculated on the
basis of dwelling
numbers:**

**Portion of 75 m²
+ 500 m² of
'accessible
landscape'**

- Enhanced, accessible and suitably designed landscape
- Within walking and cycling reach, extending deep into the landscape (2.5–5 km (short route) up to 10 km (tour))
- Strengthened route network within the wedge: removing barriers and creating gateways (ducts)
- Robust urban-rural fringe zones with green-blue programmes (quality boost)
- Experience of greenery, tranquillity and spaciousness
- Attention to lifestyle and target groups (health/use patterns/capacity to absorb visitors)
- Forest and nature-recreation areas
- Agricultural cultural landscape permeated by green-blue structure counts as well, provided it is accessible and experienceable to a certain extent



**Green urban-rural
connection derived from
dwelling numbers:**

Via

**Green factor and/or points-
based system**

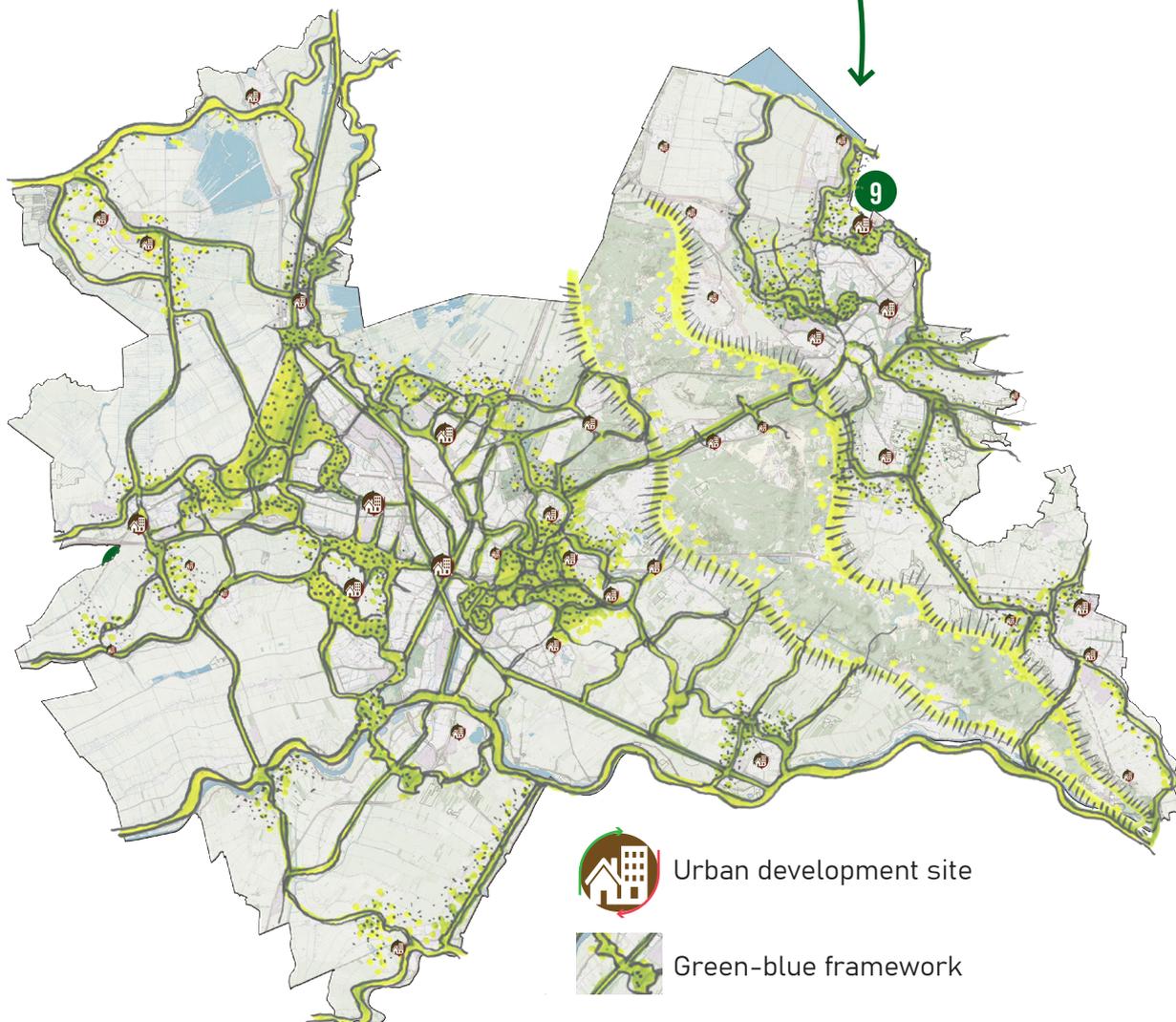
+

Portion of the 75 m²

Overview of the Groen Groeit Mee tasks linked to urbanisation challenges

- | | |
|---|---|
| 1. A12 zone Rijnenburg | 11. Valleikanaalzone |
| 2. Hollandse IJssel | 12. Amersfoort - Wegh der Weegen |
| 3. A12 zone Laagraven | 13. Breukelen and De Ronde Venen |
| 4. Kromme Rijn defence line landscape | 14. Woerden, Linschoten, Oudewater, Montfoort |
| 5. Biltse Groene Gordel | 15. Vijfheerenlanden |
| 6. Noorderpark | 16. Rhenen / Veenendaal / Renswoude |
| 7. Polderscheg (Polder wedge) | 17. Wijk bij Duurstede / Utrechtse Heuvelrug |
| 8. Zuidelijke Eemvallei (Southern Eem Valley) | |
| 9. Green buffer Amersfoort – Bunschoten | |
| 10. Stoutenburg | |

This map provides a highly schematic indication of the green-blue developments that can be linked to the urbanisation challenges and that are elaborated in more detail in the discussion cards.



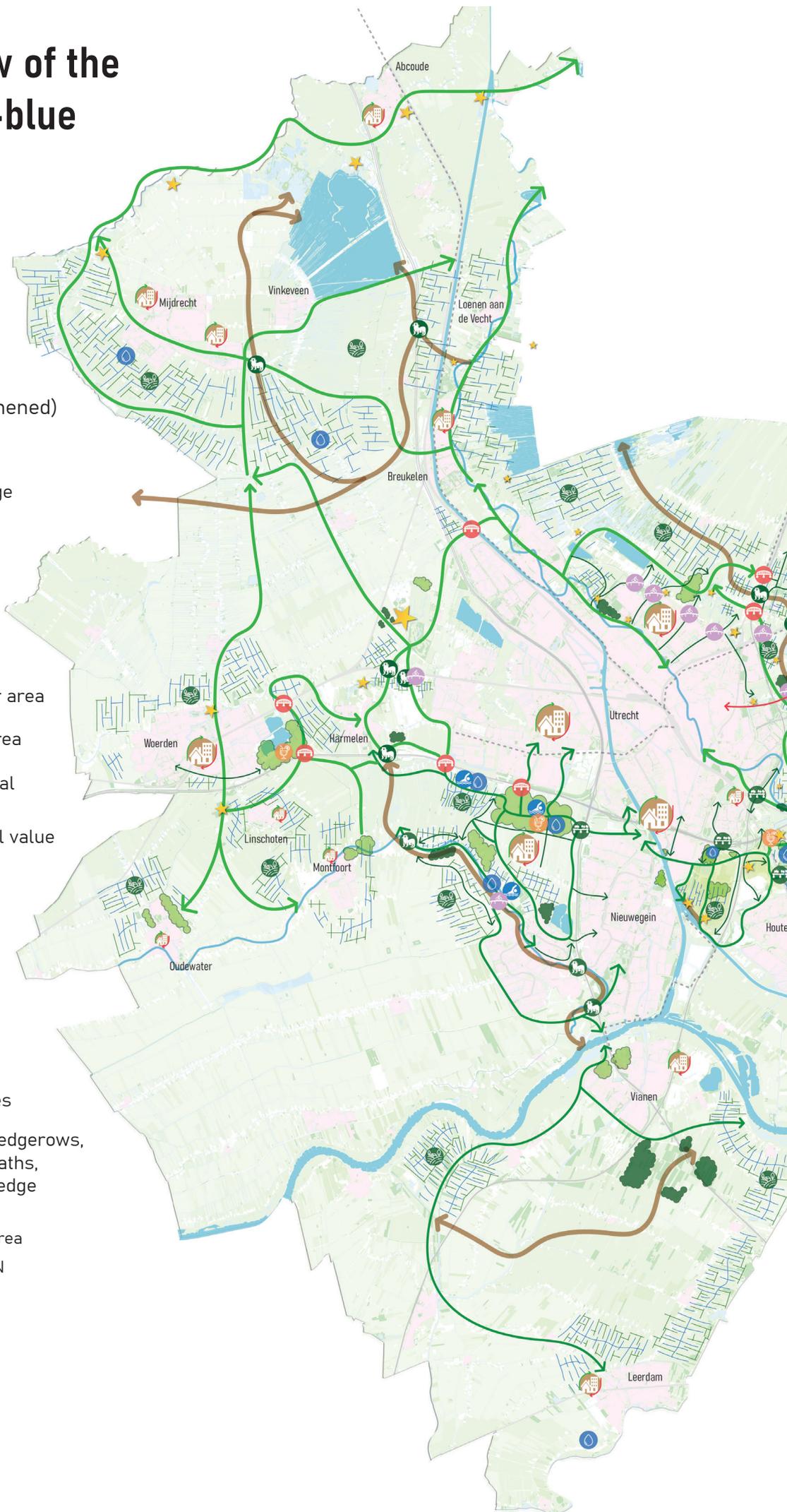
Overall overview of the potential green-blue development

Result of design-led research, providing an indicative interpretation of green-blue potentials

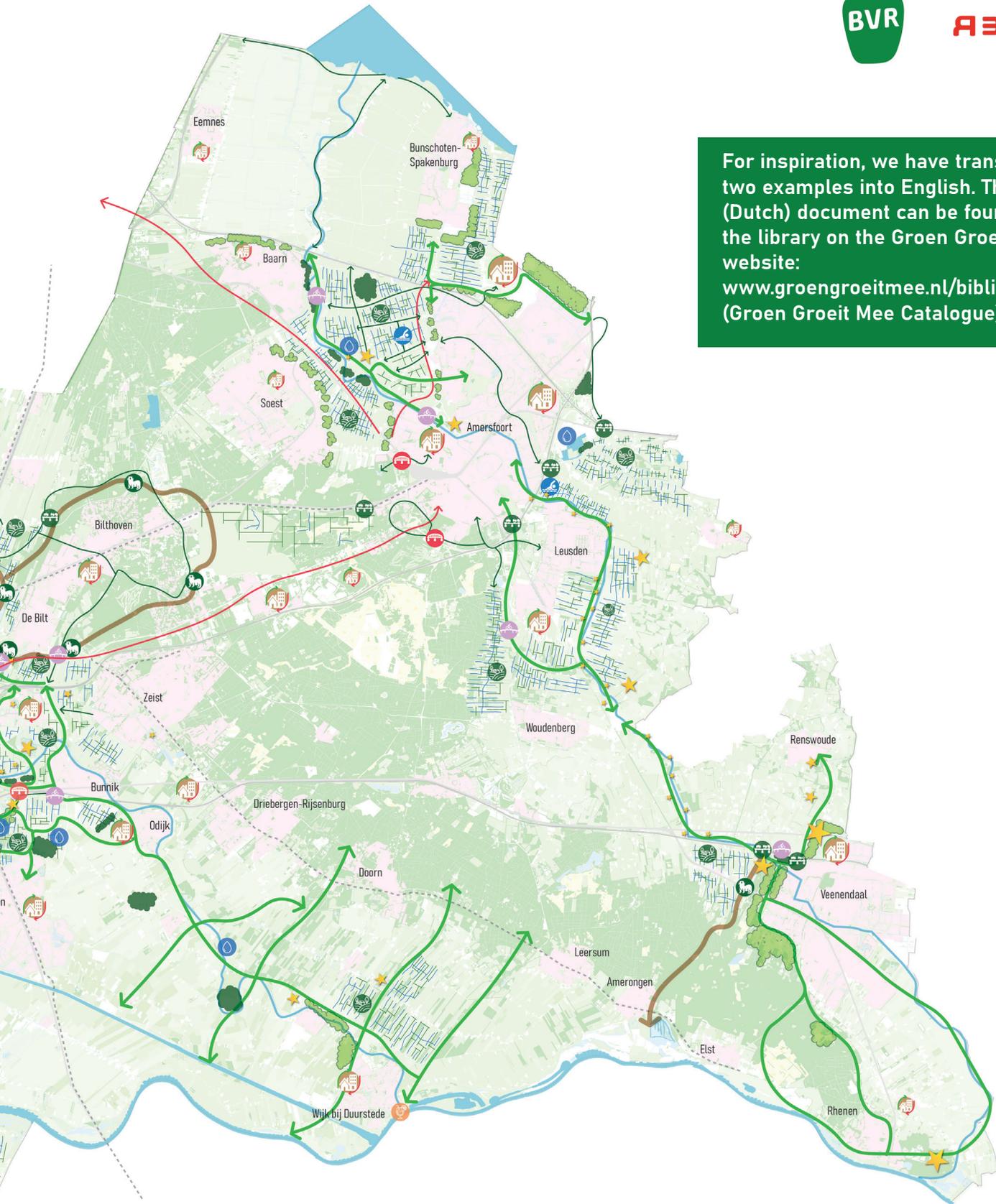
Legend

(to be developed and strengthened)

-  Cycle underpass
-  Cycle and pedestrian bridge
-  Eco/recreation overpass
-  Fauna passage
-  Sustainable agriculture and agricultural cultural landscape
-  Potential swimming-water area
-  Potential water-storage area
-  Intensifying the recreational programme
-  Place of cultural-historical value
-  Green gateway
-  Ecological corridor
-  Green-blue recreational connection (wide)
-  Green-blue recreational connection (narrow)
-  Fast-cycle route
-  Promising fast-cycle routes
-  Green-blue permeation (hedgerows, landscape elements and paths, and nature-friendly ditch-edge management)
-  New green-blue recreation area
-  New nature core outside NNN
-  Linking green-blue development to urbanisation



For inspiration, we have translated two examples into English. The full (Dutch) document can be found in the library on the Groen Groeit Mee website:
www.groengroeitmee.nl/bibliotheek
(Groen Groeit Mee Catalogue).



A12 zone Laagraven

Description

This project is a green-blue development in the A12 zone, linked to the urbanisation of Groot Merwede. This project is part of the Kromme Rijn defence line landscape example project, a green wedge of approximately 4,000 hectares, of which the A12 zone / Laagraven covers around 600 hectares. The Laagraven area already functions, and will continue to function, as an important recreational outflow area for residents of Utrecht, Nieuwegein and Houten. The green-blue development includes several potential subprojects. It also strengthens the experiential value of the UNESCO World Heritage Site Nieuwe Hollandse Waterlinie (New Dutch Waterlinie).

Status

Part of the Groen Groeit Mee example area Kromme Rijn defence line landscape.

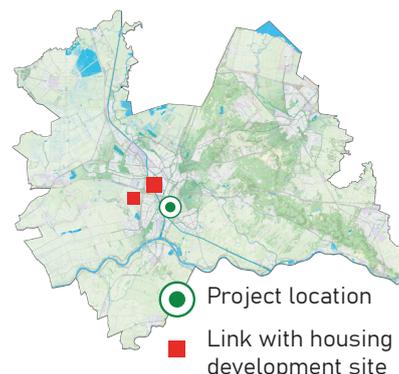
Linked to

In this study, this green-blue task is linked to part of the housing development task in the A12 zone / Metropoolpoort Groot Merwede + Rijnenburg. Ultimately, this may involve approximately 25,250 dwellings = 189 ha of green space (75 m² per dwelling) / 1,263 ha of accessible landscape (500 m² per dwelling).

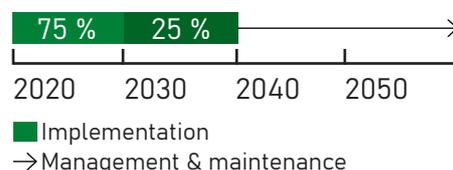
Parties

Province, U10 region, municipalities of Utrecht, Houten and Nieuwegein, HDSR, national government, residents, landowners, infrastructure managers and civil-society organisations.

Location



Timeline



Wheel of Five



- Accessibility
- Healthy people
- Biodiversity
- Identity
- Water balance

The diagram indicates, in an indicative way, which aspect may receive emphasis for this discussion card, based on the task or the characteristics of the area.

What has been outlined?

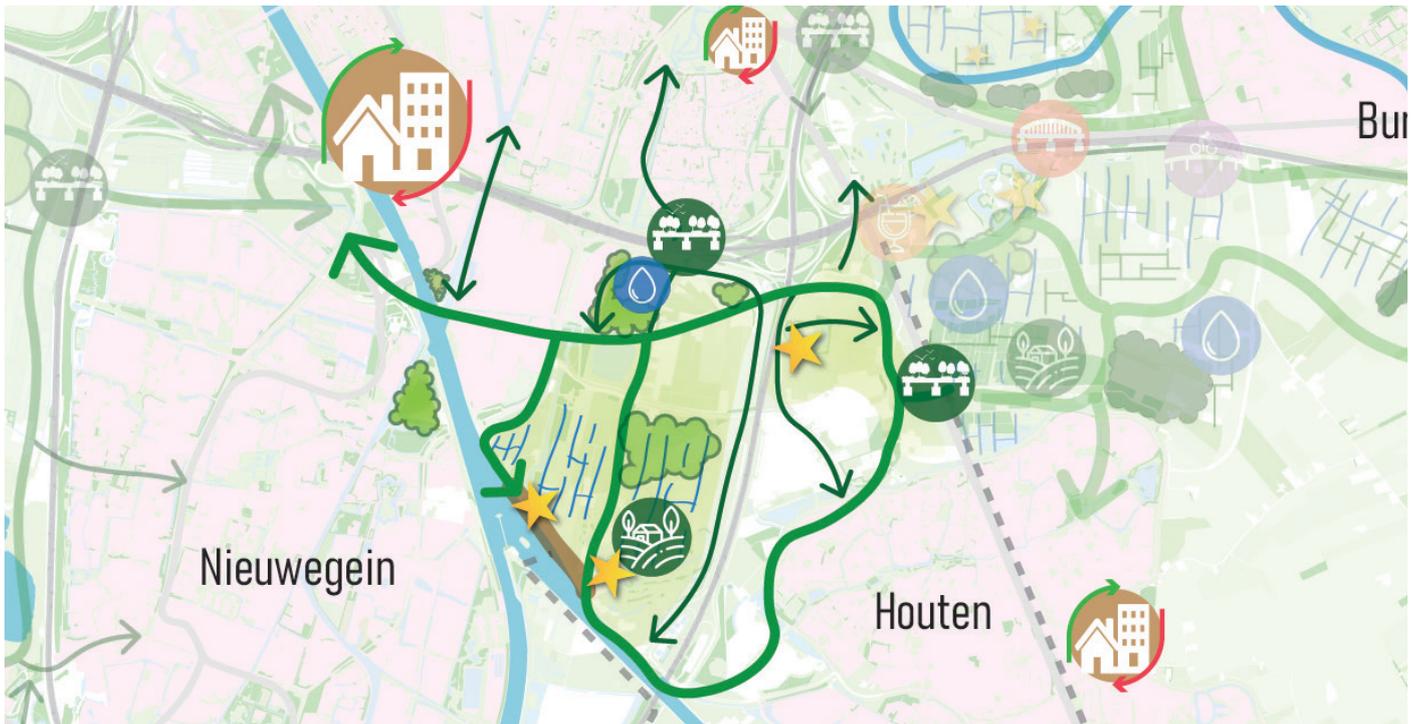
- + Development of the entire area as a landscape park
- + 65 ha of new recreation area
- + 30 ha of wide recreational connections (wide)
- + 14 km of recreational connections (narrow)
- + 2 recreation overpasses (recreaducts)
- + 20 km of nature-friendly ditch-edge management
- + 16 ha of green-blue permeation
- + 1.5 ha ecological corridor
- + 200 ha of recreational permeation of the agricultural landscape

Costs (lower / upper range)

- + Implementation: €35 million / €53 million
- + Management: €0.4 million / €0.6 million
- + Process: €7 million / €11 million

Objectives of national programmes

- ++ Soil & water leading
 - UPLG
 - Nature
- ++ Water programme
 - National Energy System Programme
 - NP RES
 - Programme for business locations
 - NP CE
- ++ Mobility and Accessibility
- ++ Housebuilding
- ++ Green space in and around the city
- ++ Heritage for the future
- ++ Healthy and green living environment
 - Space for defence
 - Environmental programme



Legend (to be developed and strengthened; not all legend items appear on the map)

- | | | | |
|---|---|---|--|
| Cycle underpass | Potential swimming-water area | Ecological corridor | Green-blue permeation (hedgerows, landscape elements and paths, and nature-friendly ditch-edge management) |
| Cycle and pedestrian bridge | Potential water-storage area | Green-blue recreational connection (wide) | New green-blue recreation area |
| Eco/recreation overpass | Intensifying the recreational programme | blue recreational connection (narrow) | New nature core outside NNN |
| Fauna passage | Place of cultural-historical value | Fast-cycle route | Linking green-blue development to urbanisation |
| Sustainable agriculture and agricultural cultural landscape | Green gateway | Promising fast-cycle routes | |

Indicative sub-tasks

- Develop the area as a landscape park, intensifying recreation around the Noordplas in connection with existing recreation at the southern lake: additional woodland and sunbathing meadows
- Use the northern Laagraven lake as peak water-storage area and create 60 hectares of recreationally accessible water-storage landscape (boardwalks), with 50% open water and 50% wetland vegetation in the Waterline zone
- 🔑 Two new recreational green connections between Utrecht Lunetten and Polder Laagraven (5 km)
- 🔑 One robust green-blue corridor from the canal junction south of the A12 to Fort Vechten: completion of a cycle and pedestrian route accompanied by a landscape green zone (approx. 5 km; 30 m wide)
- Additional enhancement of the green-blue corridor along the banks of the Merwede Canal – Amsterdam–Rhine Canal (as an access route): cycle and pedestrian path with amenities (viewpoints, seating, lighting etc.)
- Green-blue corridor Houten – Laagraven lake: completion of cycle and pedestrian path accompanied by a landscape green zone (total width 30 m)
- Overpasses (ducts): additional crossings for green, water and slow traffic on the Waterline Canal (north-south connection), including an extra railway crossing at Houten
- Ditch-edge management



Open fields with occasional enclosure created by edge plantings and woodland fringes, offering recreation close to the urban area

Rhenen/Veenendaal/Renswoude/Utrechtse Heuvelrug

Description

This project is a green-blue development that strengthens recreational and ecological values in the area of Rhenen, Achterberg, Kwintelooyen, Veenendaal and Renswoude, with the Grebbelinie (Grift and Valleikanaal) as its structuring backbone. Roode Haan example area.

Status

Groen Groeit Mee example area

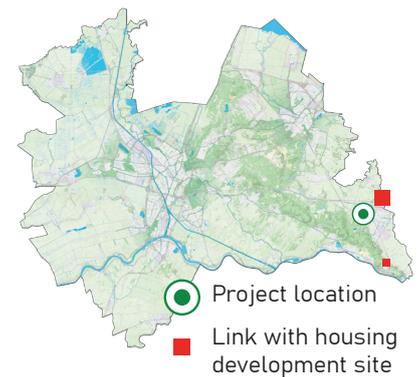
Linked to

In this study, this green-blue task is linked to housing development in Rhenen Achterberg West and Veenendaal De Klomp. Ultimately, this may involve approximately 15,555 dwellings = 116 ha of green space (75 m² per dwelling) / 778 ha of accessible landscape (500 m² per dwelling). It is also linked to the forest strategy and UPLG.

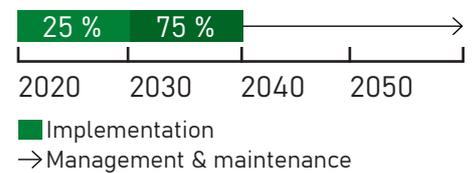
Parties

Province of Utrecht, Foodvalley region, municipalities of Rhenen, Veenendaal, Utrechtse Heuvelrug and Renswoude, Vallei en Veluwe water authority, residents, landowners, infrastructure managers and civil-society organisations.

Location



Timeline



Wheel of Five



- Accessibility
- Healthy people
- Biodiversity
- Identity
- Water balance

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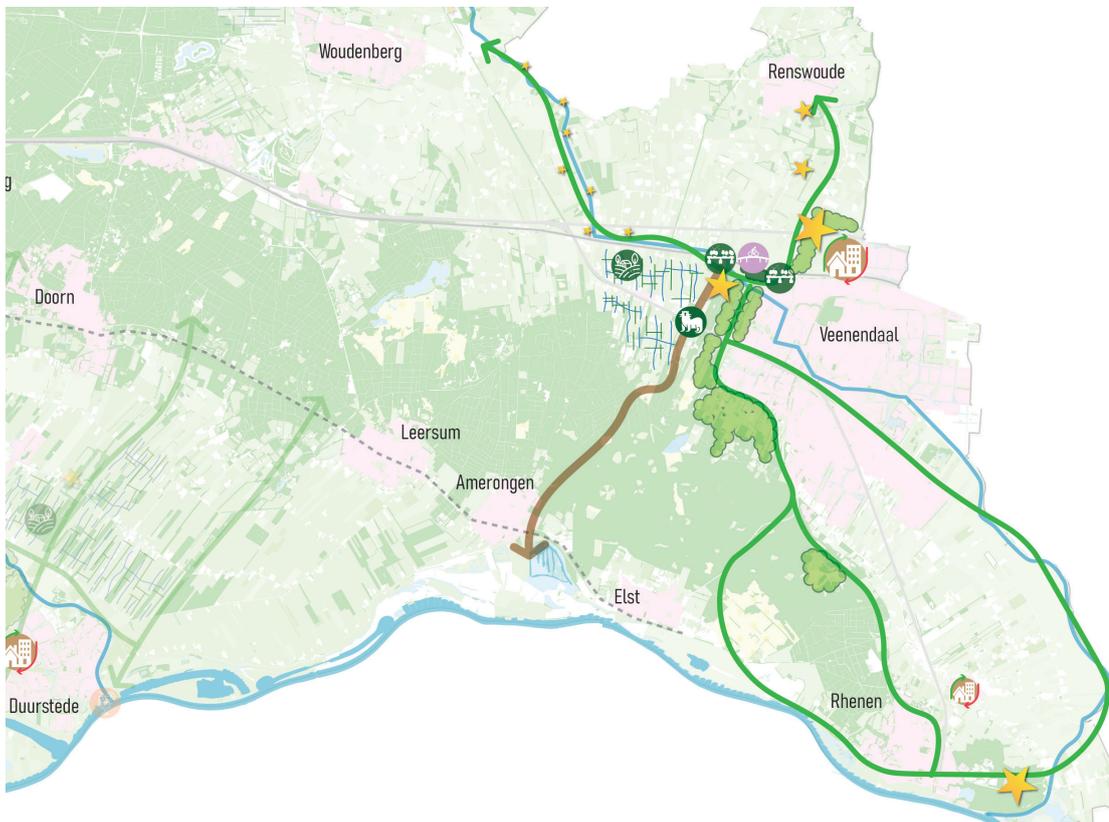
- + 200 ha of recreation area
- + 140 ha of recreational connections (wide)
- + 1 fauna passage
- + 2 recreation overpasses (recreaducts)
- + 30 ha of new nature core
- + 190 ha of ecological corridors
- + 30 ha of green-blue permeation
- + 10 km of nature-friendly ditch-edge management
- + 520 ha of recreational permeation of the agricultural landscape

Costs (lower / upper range)

- + Implementation €106 million / €158 million
- + Management €1 million / €2 million
- + Process €21 million / €32 million

Objectives of national programmes

- ++ Soil & water leading
- ++ UPLG
- ++ Nature
- ++ Water programme
- National Energy System Programme
- NP RES
- Programme for business locations
- NP CE
- Mobility and Accessibility
- + Housebuilding
- + Green space in and around the city
- ++ Heritage for the future
- ++ Healthy and green living environment
- Space for defence
- Environmental programme



Legend (to be developed and strengthened; not all legend items appear on the map)

- | | | | |
|---|---|---|--|
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| Fauna passage | Place of cultural-historical value | Fast-cycle route | Linking green-blue development to urbanisation |
| Sustainable agriculture and agricultural cultural landscape | Green gateway | Promising fast-cycle routes | |

Indicative sub-tasks

Roode Haan example area

- Green-blue connection from the Rhenen station outer gateway, via Kwintelooyen to Veendaal (Centrum and West stations and De Klomp), Turfweide and De Roode Haan
- Green-blue connection via the Groene Grens along the Grift to Roode Haan
- Green-blue permeation of the agricultural landscape
- Development of a nature core area
- New recreation area on the urban fringe of Veendaal and Kwintelooyen
- Two recreation overpasses to cross the motorway
- Ecological corridor from the Valleikanaal towards the Nederrijn
- One cycle and pedestrian bridge over the Valleikanaal



Green-blue connections and recreation areas throughout the cultural-historical landscape

Colophon

Groen Groeit Mee Catalogue; Discussion cards for inspiration for Groen Groeit Mee, version 1.0

BVR consultants, commissioned by the province of Utrecht
With contributions from Rebel Group

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Utrecht/Rotterdam, december 2023

More information

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