

ISTANBUL - A GLOBAL CITY IN THE MAKING: How to Achieve Sustainable Urbanism in the face of the Growth Paradigm?

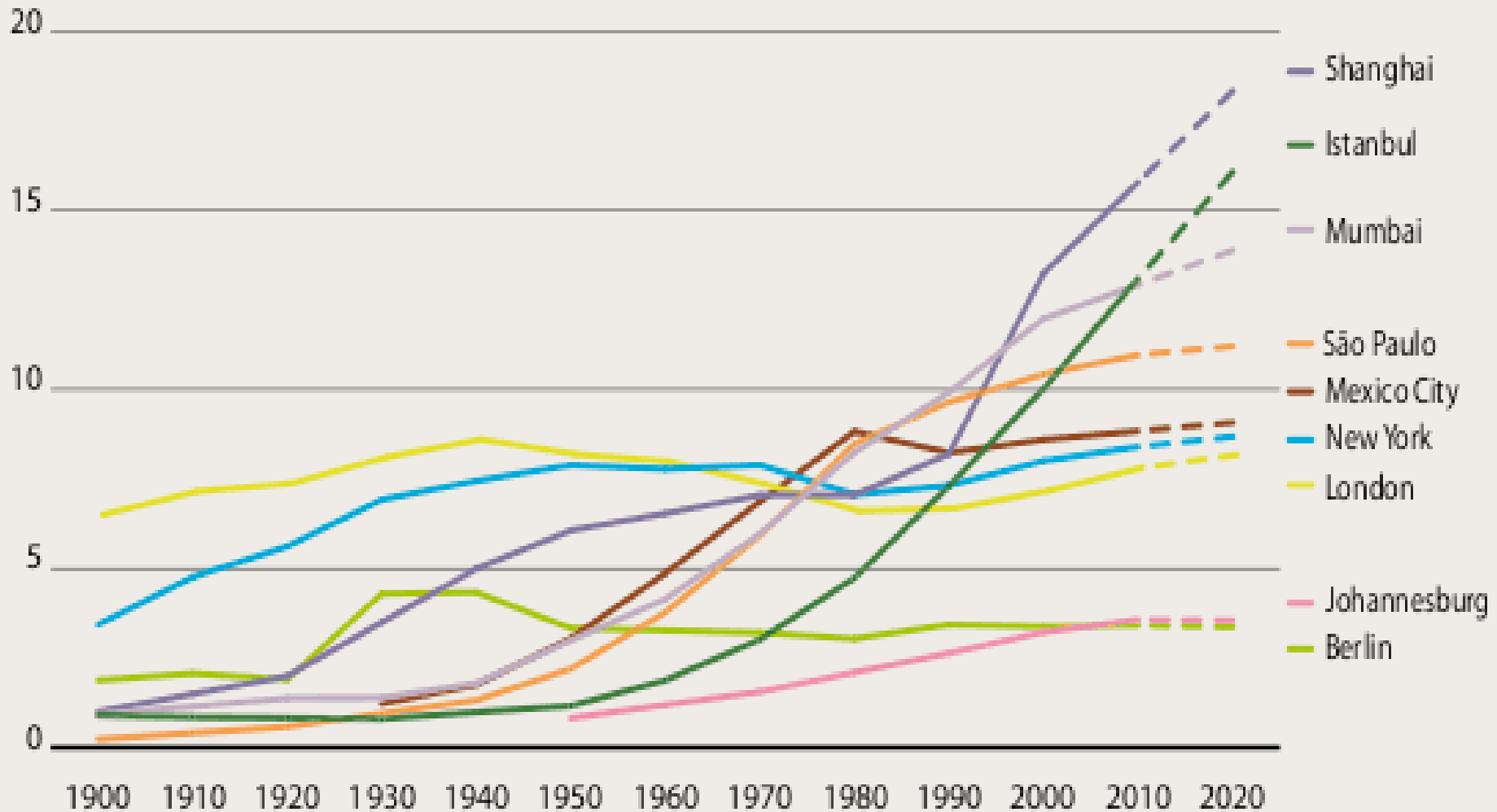
PricewaterhouseCoopers' "Emerging Trends in Real Estate Europe Report 2010" ranks Istanbul No. 1 for city development prospects in Europe in 2010.

Housing loans increased from TL 3.5 billion in 2004 to TL 37.5 billion in 2008

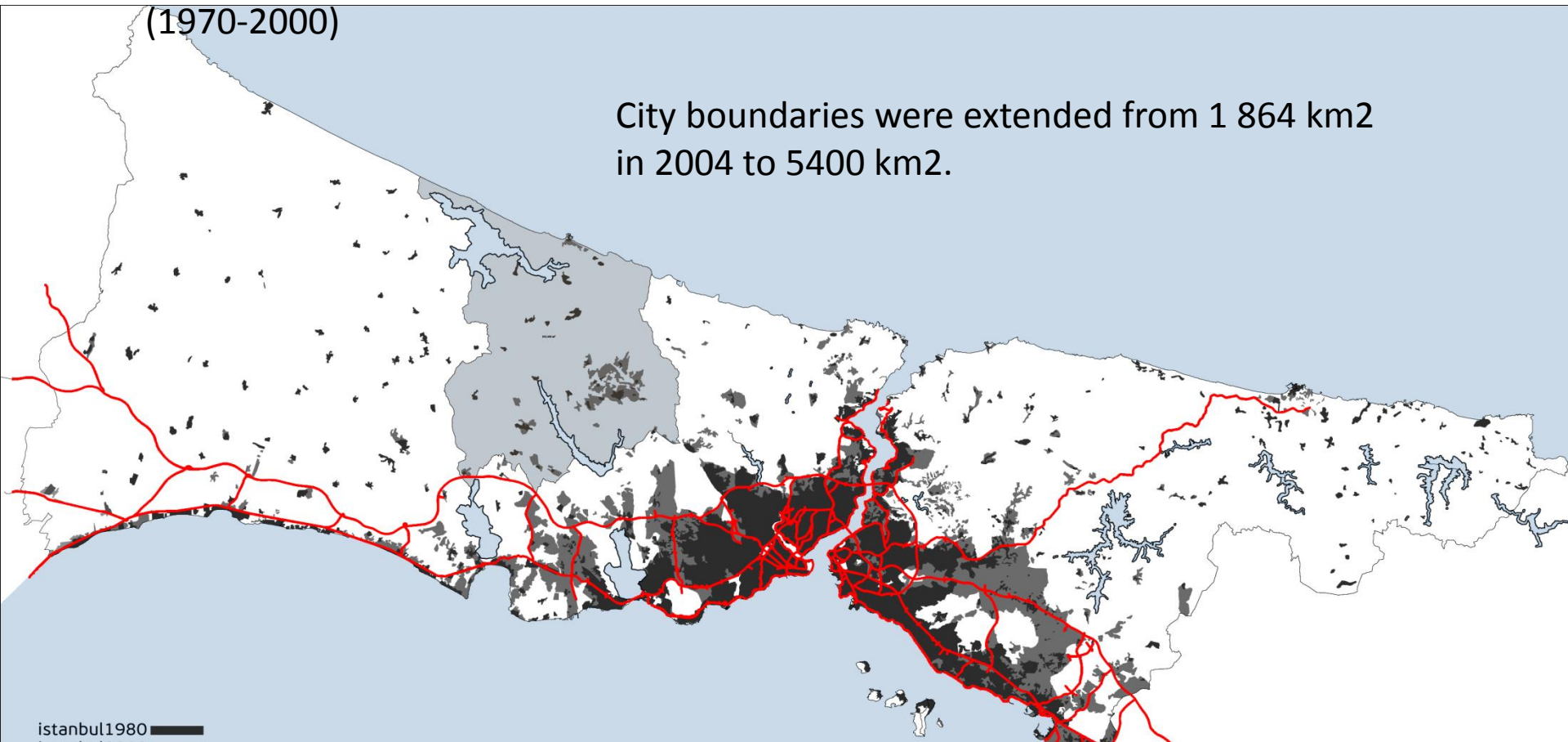


POPULATION GROWTH IN THE URBAN AGE CITIES

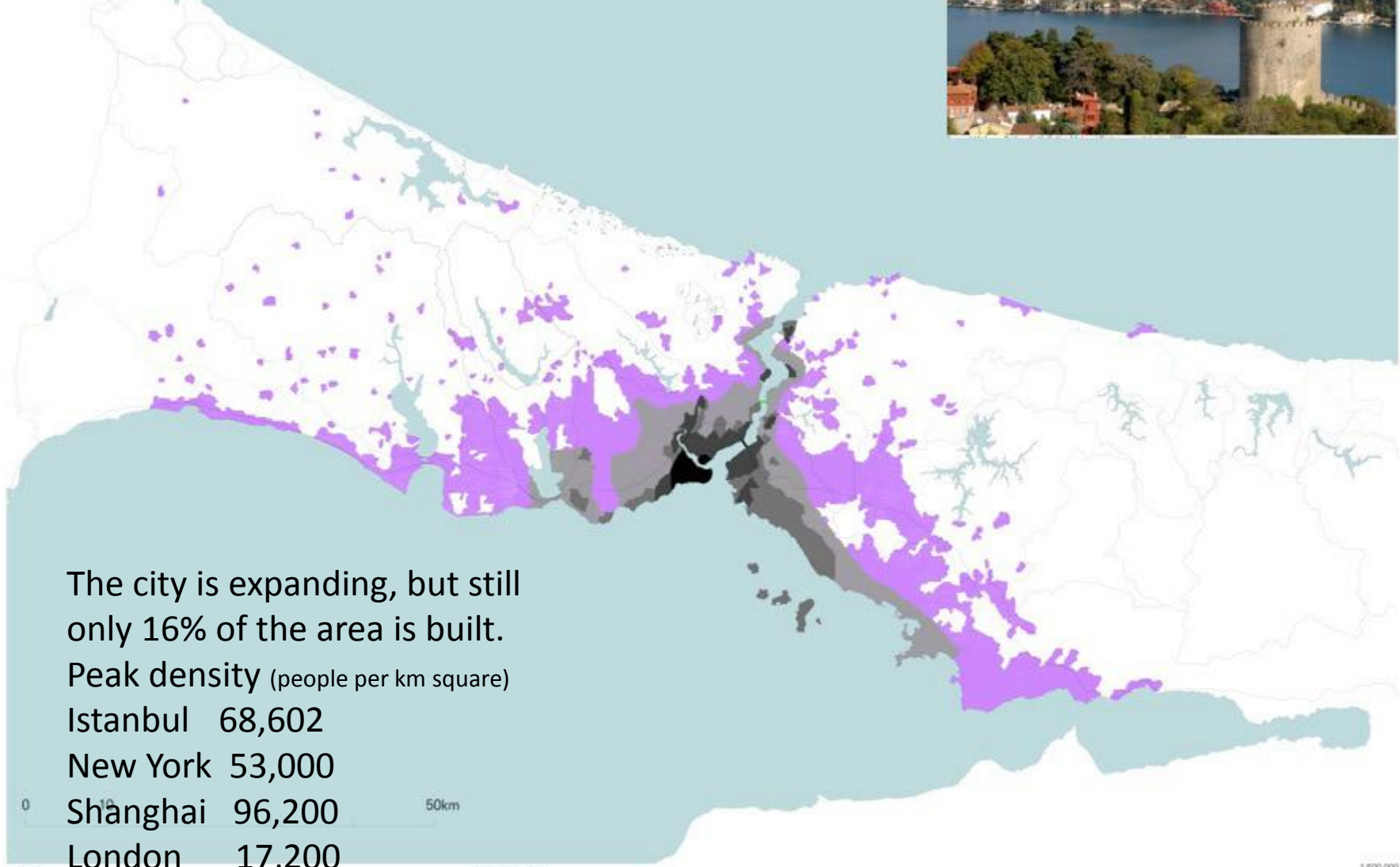
Million people



| | İstanbul | Turkey |
|------------------------------------|-----------------|-----------------------------------------------|
| Size (kmsquare) | 5400 | 769604 |
| Population (2012) | 13-14 M | 72 M |
| Working population | 3.5 M | 26 M |
| Service workers | 1.8 M | 8.7 M |
| Industrial workers | 1.1 M | 3.4 M |
| GDP (2011) | | 772,3 Million USD (%25 accounted by Istanbul) |
| Population growth rate (1970-2000) | 337 | 190 |



If Istanbul's population growth increases at the same speed, by 2025, the population will reach 20-22 million.



The city is expanding, but still only 16% of the area is built.

Peak density (people per km square)

Istanbul 68,602

New York 53,000

Shanghai 96,200

London 17,200

Mexico City 48,300

LEGEND
ca 1400
ca 1900
ca 2000

CITY GROWTH
Reduced rural migration didn't hinder Istanbul's rapid growth.
Shown in purple, development that occurred in the 80s and 90s, that coincides with the construction of the 2nd Bosphorus Bridge and Highway.

Growth economy focuses on Istanbul: The aim of the government is to increase GDP by 2023 to 2 trillion 64 billion USD and become one of the top 10 economies in the world, increasing per capita income to 25,076 Dollars.



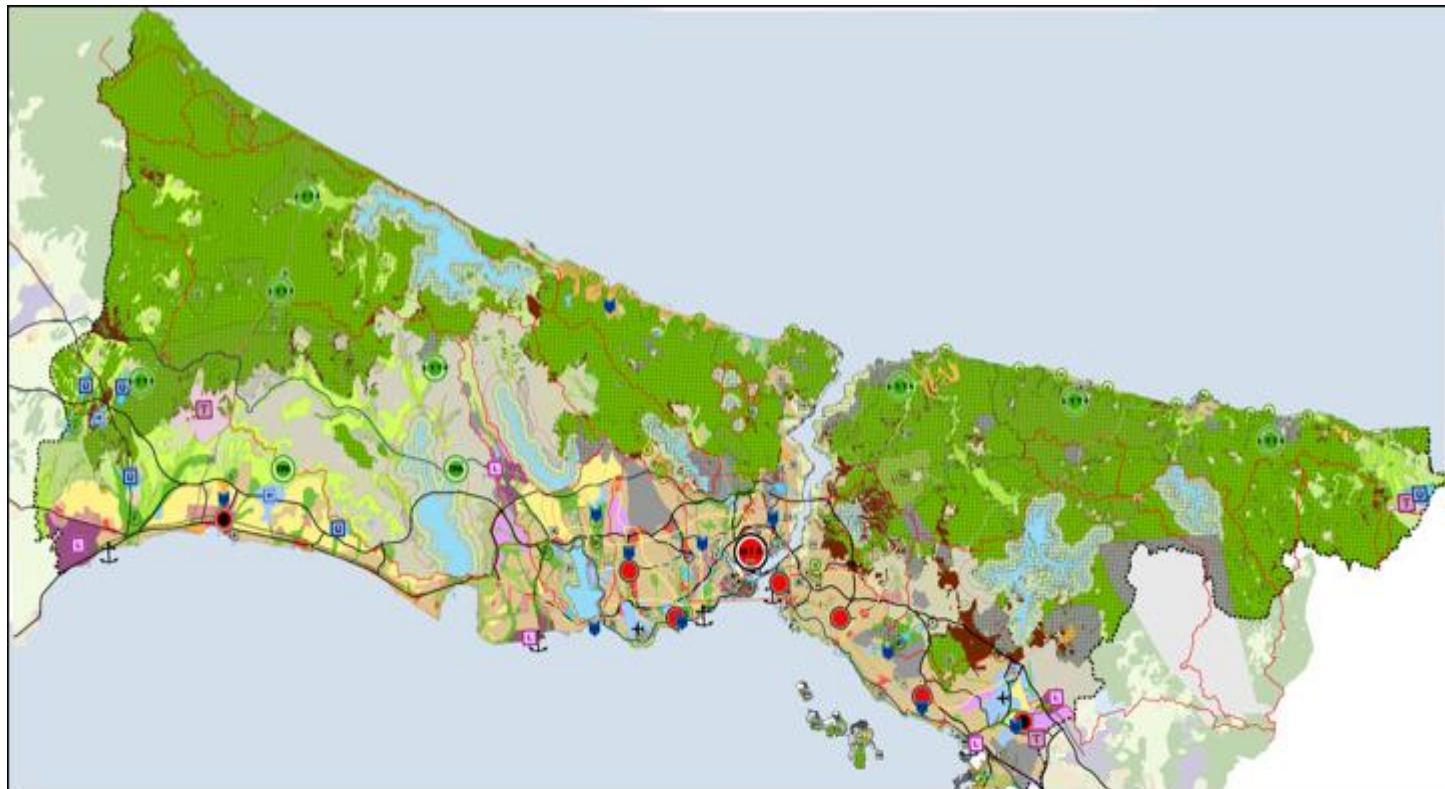
Crazy projects for Istanbul

3rd Airport next to Terkos Water basin, with 150 million passengers per year, with 5 runways; Kanalistanbul; two new cities; the 3rd Bridge and its connecting highways

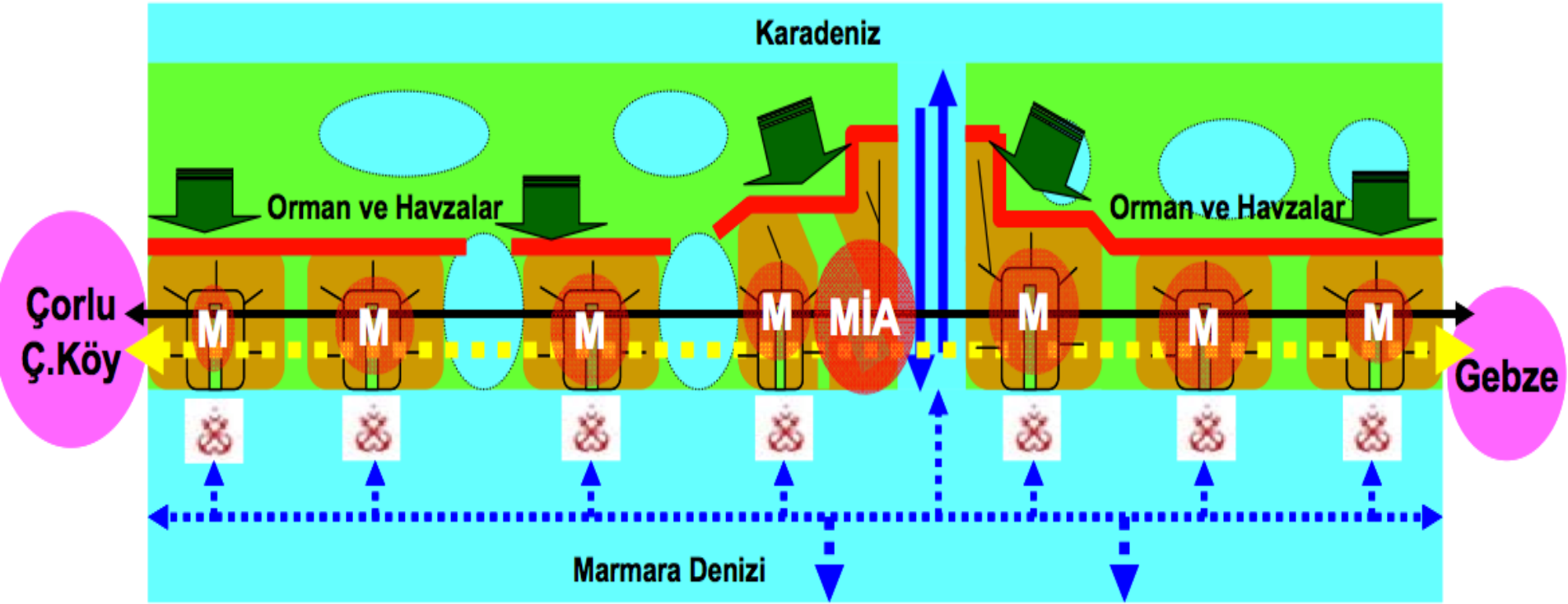
Istanbul did not have a Metropolitan Scale plan until 2009. The IMP was set up in 2004 to prepare the masterplan of the city. This was made possible by new laws (2005: 5393 and 5366) decentralising planning and implementation action to the municipal level.

Masterplan took two years to prepare and was passed through the municipal assembly in 2009.

The population threshold is kept at 16-17 million max. by 2020. The third bridge was not in the plan!



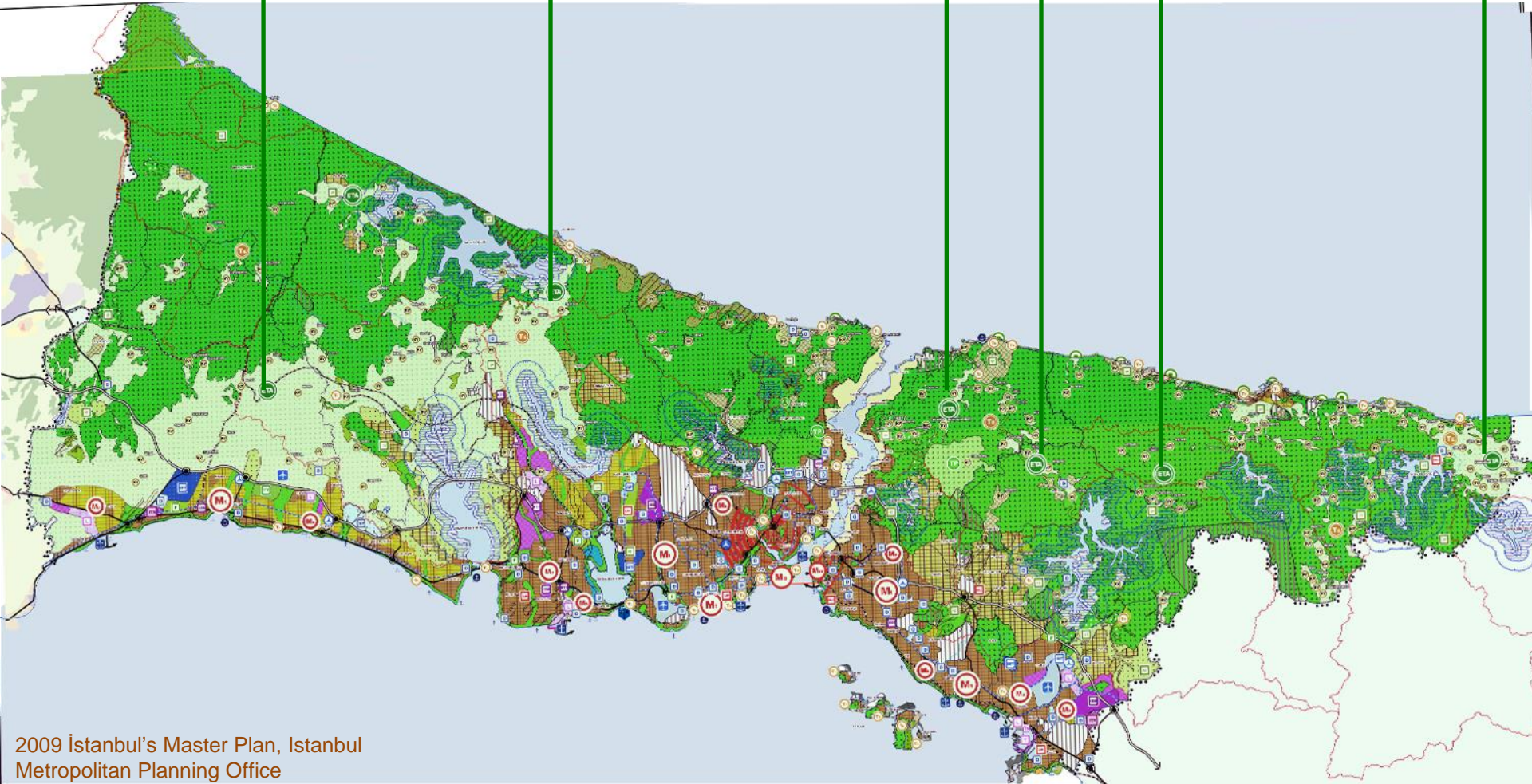
Istanbul Masterplan: diffuse the central business districts along the Marmara shore and connect them with one another through rail, sea and road transportation networks



Şekil 3. İstanbul İçin Öngörülen Makroform

Will the city be able to check its growth considering that its sustainability is at stake; will it be able to treat existing agricultural, water, forest and natural habitat as assets to be protected? How will it do so? This is the main concern of the IABR Making City Project .

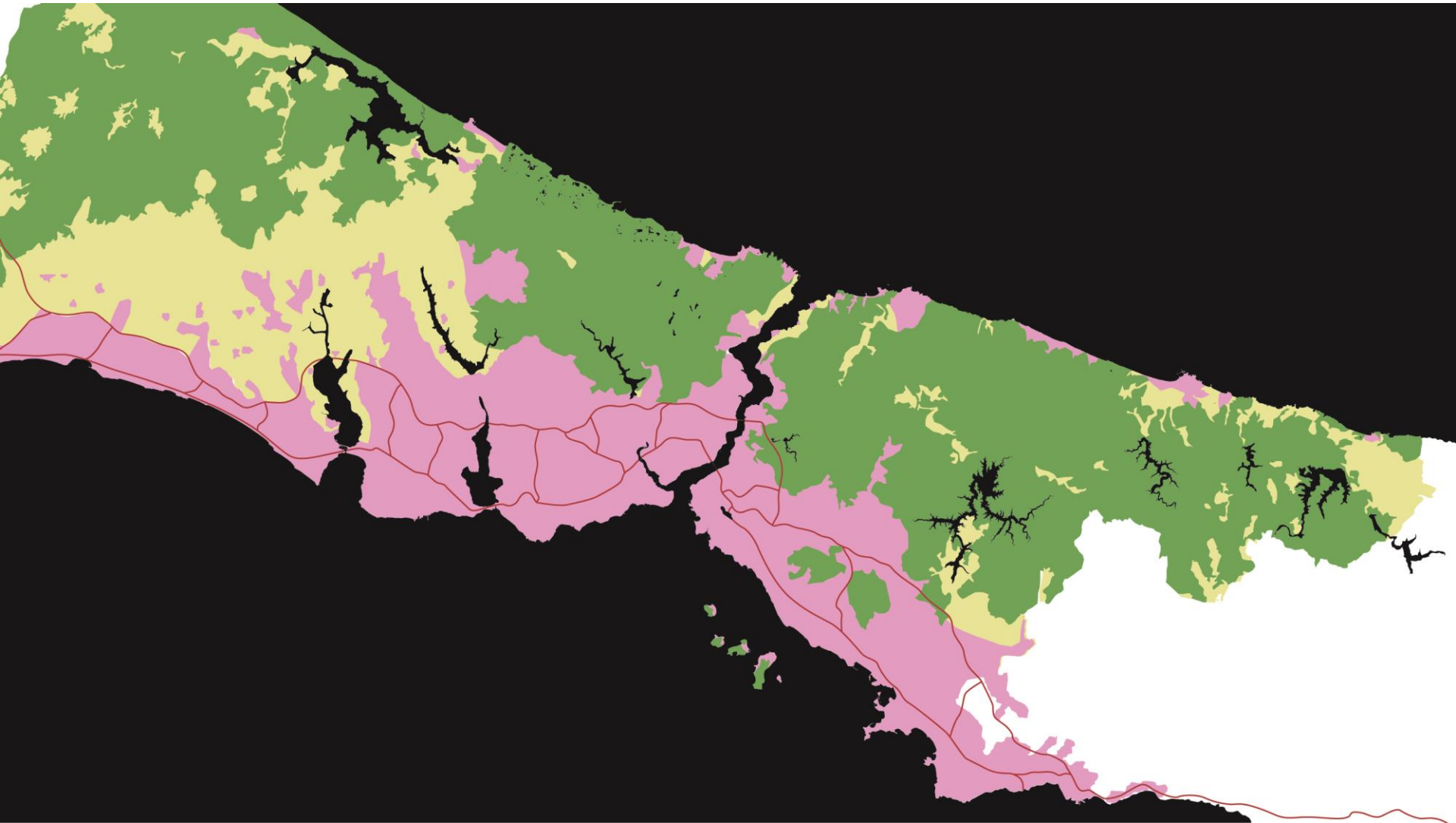
Ecological Agriculture Zones



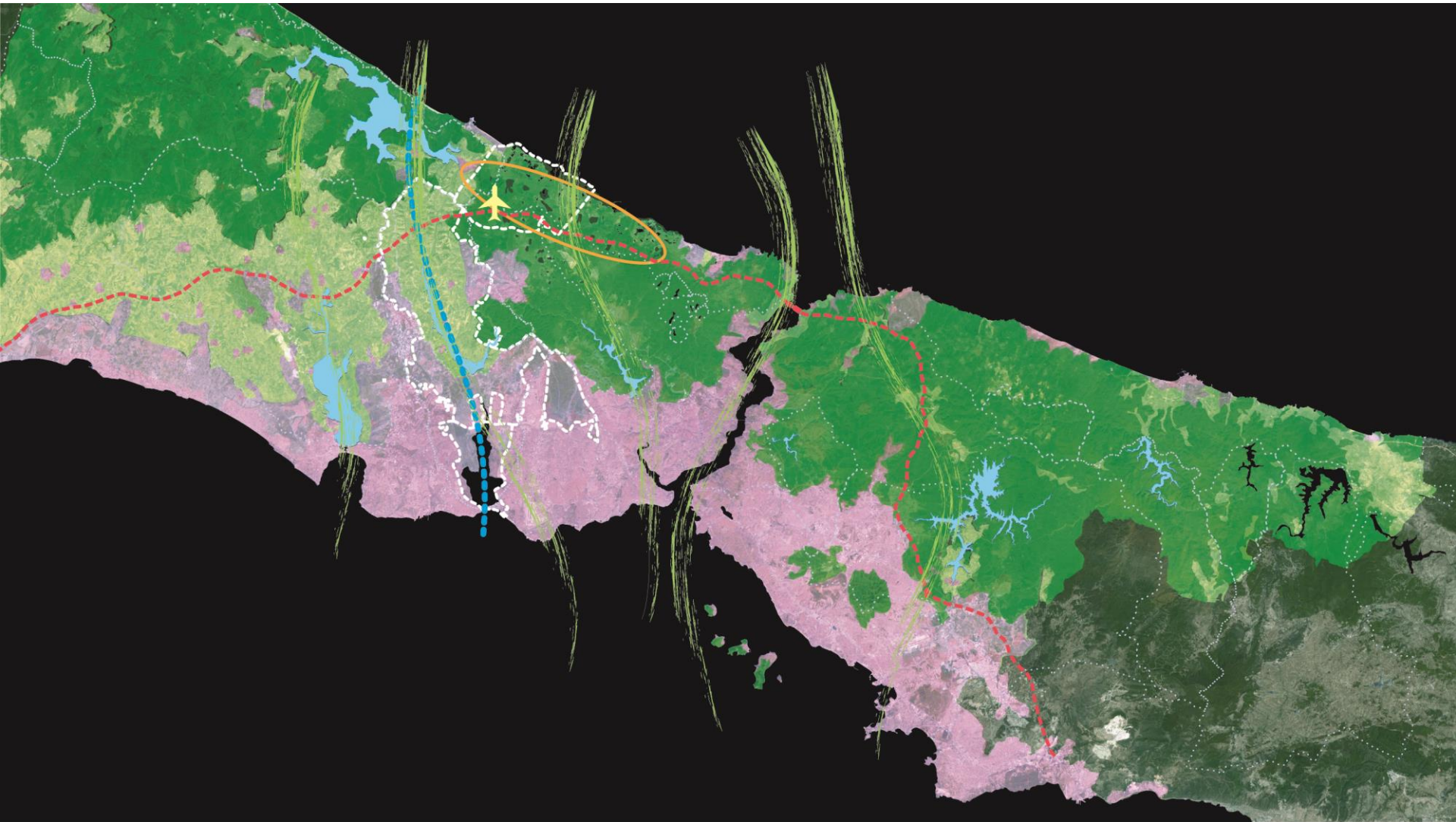
2009 İstanbul's Master Plan, İstanbul Metropolitan Planning Office

Making City, İstanbul test-site project, IABR 2012

HOW TO Balance natural resources and urbanisation



Resources under pressure – agricultural and natural resources



A patchwork style of governance in Istanbul:

Water Authority

Agriculture

Forestry

Istanbul Metropolitan Municipality

Ministries (Energy, Transportation, Tourism...)

TOKİ (Mass Housing Administration accountable directly to the Prime Minister's Office)

District Municipalities



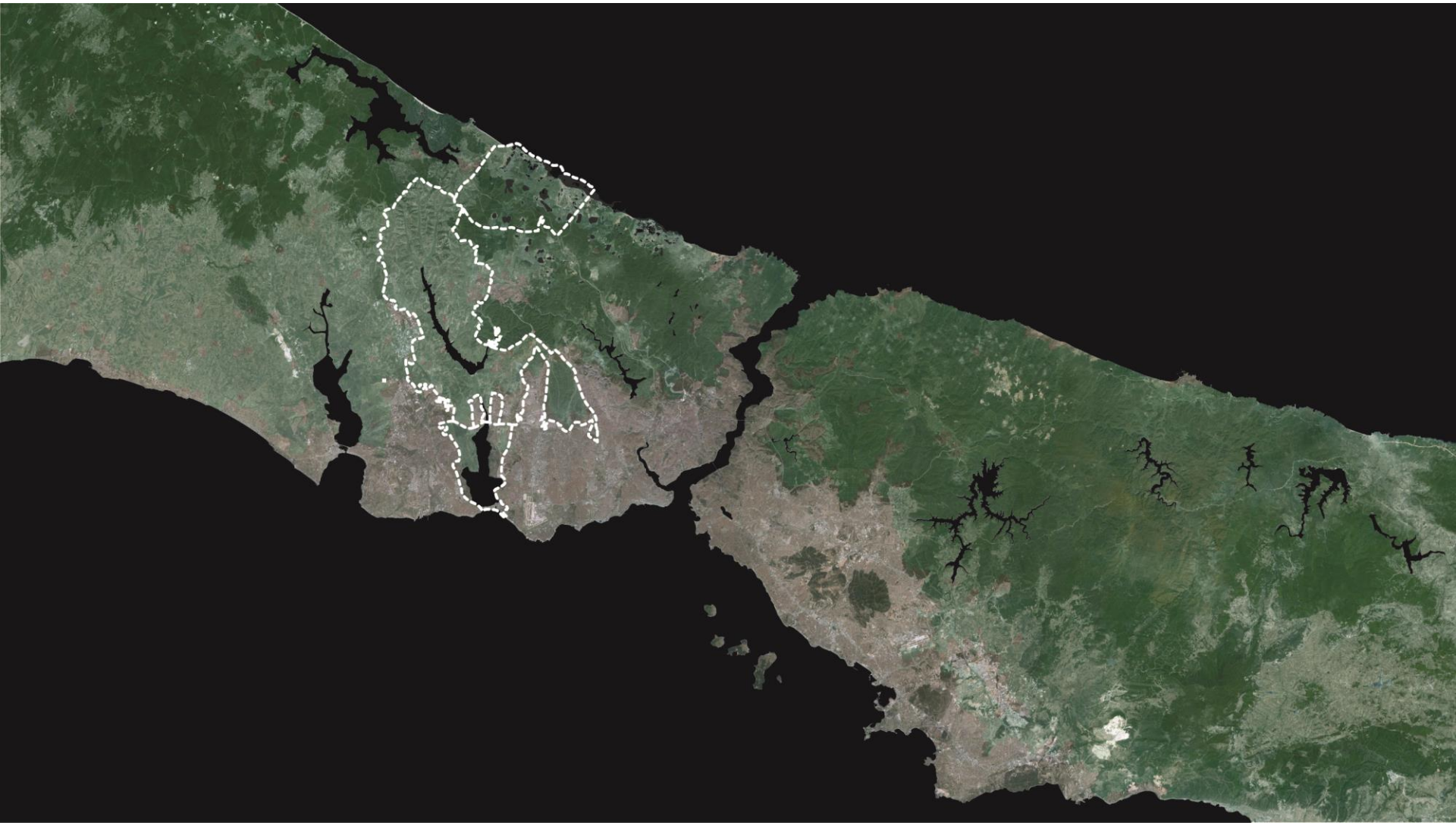
Forest lands account 47 %; agricultural lands account 27% of Istanbul area, 7 watershed areas.

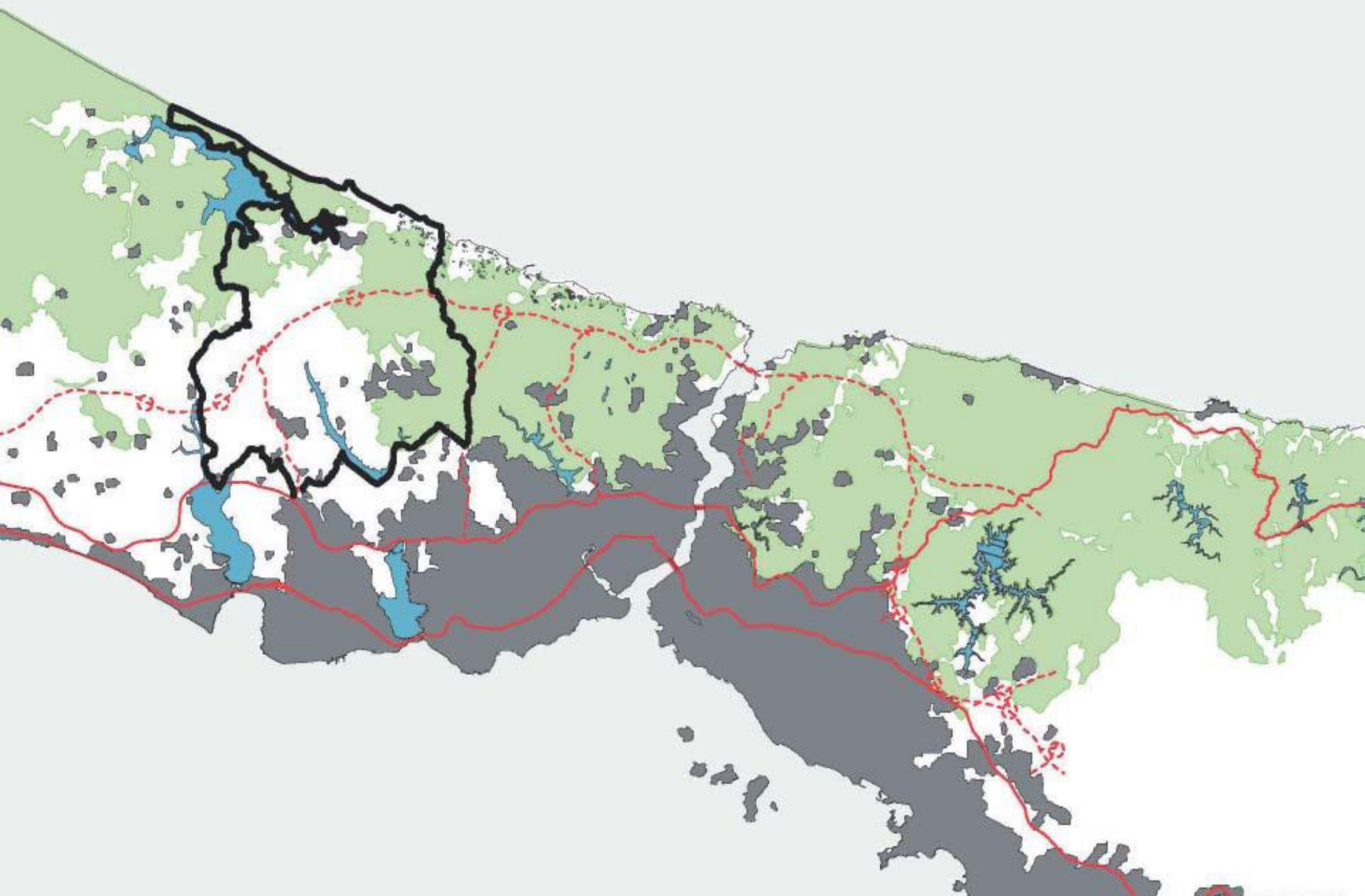
LEGEND

Agriculture Land

1:500 000

Recent developments - centralised governance





51% of the area of Arnavutköy is forest; 35% agricultural land, only 14% built environment.

Why Arnavutköy: The city is pushing towards the North, into the green and water zones of the city; the population of Arnavutköy increased from 57 thousand in 1990 to 163.5 thousand in 2008. Istanbul population is expected to grow from 12 million in 2010 to 20-22 million in 15-20 years.



Growth is presented as being inevitable or unstoppable, so the question became how to harness it so that the natural assets of the area (of Istanbul) can **STILL** be protected. The IABR question became how to put the growth of Arnavutköy / Istanbul on to an ecological footing.

How to make a city whereby it protects its waterbasins, agricultural areas and forests? How to make a city where the urban growth does not become a menace for water resources?

How can the city be transformed from being a consumption monster to an active and positive contributor to its environment?

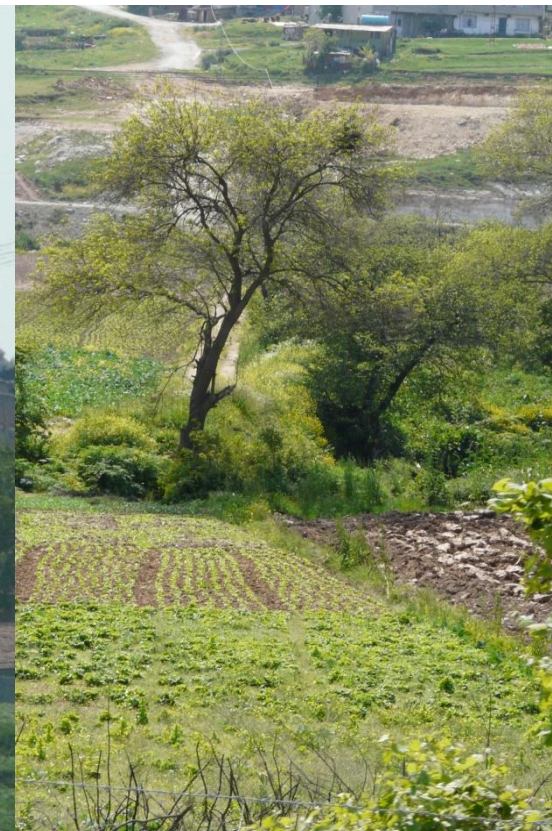


With this 5th IABR project the Arnavutköy Municipality took on board the challenge of achieving ecological sustainability under conditions of mega urban growth. It asks whether through innovative design and governance strategies and practices the city can achieve ecologically-sound and sustainable growth.



The Strategic Vision aims to establish a framework that informs the individual pilot interventions. The pilot interventions are intended to put into action the elements of the strategic vision.

In the process of the elaboration of the Strategic Vision and Action Plan, the Municipality, with the *Istanbul Atelier*, works together with the stakeholders, such as the Istanbul Water Authority İSKİ, the Agriculture and Forestry Commissions and also with the Metropolitan Municipality. This is a multi-stakeholder vision development process where the intention is to put into action the pilot projects that will demonstrate the main arguments of the strategic vision for the area.



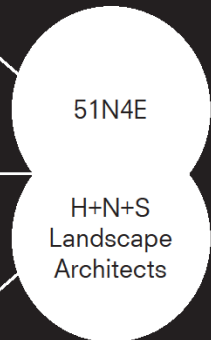


External input :
Dutch Ministry of Infrastructure & Environment
Dutch Ministry of Economics
Dutch Ministry of Innovation & Agriculture
Dutch Ministry of Foreign Affairs / Dutch Consulate
Municipality of Rotterdam, NL

Initiators



Coordinators



External consultants :
Asli Cicek, BE (Istanbul)
Thorsten Schuetze, TU Delft, NL (Water)
Sybrand Tjallingii, TU Delft, NL (Water)
Peter Smeets, Wageningen UR, NL (Agriculture)
Paul Jorna, BBN adviseurs, NL (Development strategy)

Study team

Atelier Istanbul



Actors involved

The Istanbul Atelier is joined by two architectural and urban planning offices from Holland and Belgium – H+N+S and 51N4E – and Istanbul Bilgi University Architecture Faculty from Istanbul, as well as the Municipality Projects Department, and the curatorial team of the 5th IABR. The Istanbul Atelier finalised the Arnavutköy Strategic Vision Plan and Briefs for the Action Plan in November 2011 .



Arnavutköy Municipality and the 5th IABR jointly established the *Istanbul Atelier* (51N4E and H+N+S and AWB and IABR)

It sets out to explore the need to integrate productive landscapes (water, agriculture) and urban development into one coherent strategic vision for the northern edge of Istanbul.

New type of questioning: Transversal and Integrative Thinking

Can the city contribute to its water problem?

Can the waste water be used in productive ways rather than dumping away?



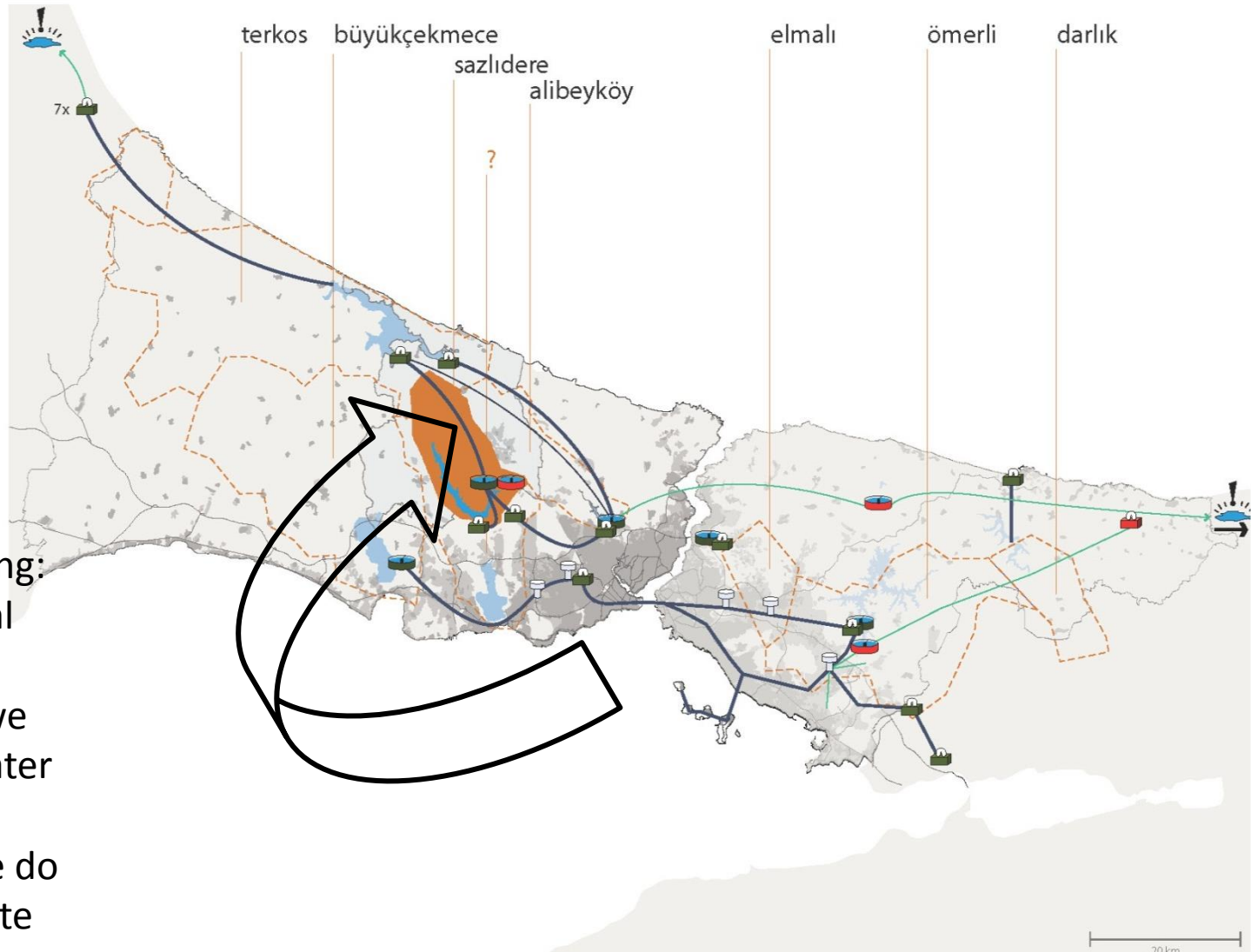
INTERNATIONAL
ARCHITECTURE
BIENNALE
ROTTERDAM



Water has to be brought in from much further locations such as Melen and

Istranca

- existing connection
- planned connection
- existing pumpingstation
- planned pumpingstation
- existing purification installation
- planned purification installation
- planned bassin
- existing reservoir



The silo thinking:

Usual technical questions:

1. Where do we bring more water from?
2. What do we do about the waste water?

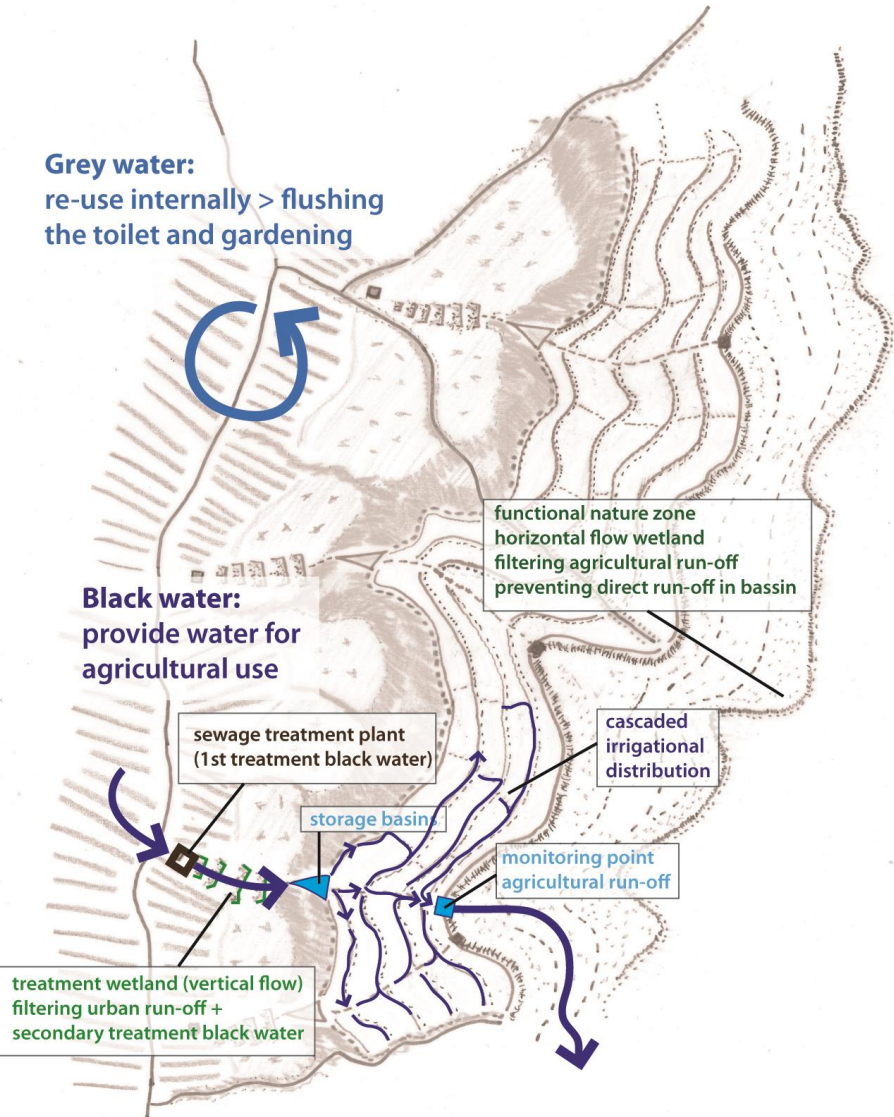
If the water route of Istanbul Metropolitan Region would become a cycle: huge potential for the productivity of the Region

70 HA AGRICULTURE
25,000 PEOPLE
± 7.5 HA TREATMENT WETLAND.

Grey water:
re-use internally > flushing
the toilet and gardening



Black water:
provide water for
agricultural use



Drinking water

Havza sınırları ve anak sistemi

- Topoğrafyayı havzalarla tanıtmak
- Şehrin sırtlar üzerinde büyümesi
- Su rezervlerinin ekolojik tarım için önemi
- Su rezervlerinin korunması ve verimliliğinin artırılması

