

Landscape Design IV - 14554
2021-2022 Fall Semester



**RECLAIMING
LANDSCAPE**

POST-INDUSTRIAL SCENARIOS FOR
GULF OF İZMİT

STUDIO REPORTS:
2021-2022 FALL SEMESTER

LANDSCAPE DESIGN IV

ITU
LANDSCAPE ARCHITECTURE
DEPARTMENT

STUDIO REPORTS:
2021-2022 FALL SEMESTER
PEM 411E

LANDSCAPE PROJECT IV

RECLAMING LANDSCAPE: POST INDUSTRIAL SCENARIOS FOR GULF OF IZMIT

Istanbul Technical University,
Faculty of Architecture,
Department of Landscape
Architecture, Taskısla Campus

Phone: +90 (212) 2931300
ext.2808 Fax: +90 (212) 2514895
E-mail : peyzajmim@itu.edu.tr

Editors:

Meltem Erdem Kaya
Nergis Aşar

Graphic Design:
Nergis Aşar

Assoc.Prof. Dr. Meltem Erdem Kaya
Res. Assist. Nergis Aşar

DROSCAPE

Reclaiming Landscape: Post-Industrial Scenarios for Gulf of Izmit

“Drosscape; is the creation of a new condition in which vast, wasted, or wasteful land surfaces are modeled in accordance with new programs or new sets of values that remove or replace real or perceived wasteful aspects of geographical space. Drosscapes are neither intrinsically bad nor good but a natural result of consumption activities, industrial and economic growth. Berger, 2007.

“New landscapes are continuously created while others are destroyed. The cultural landscapes of the 21st century include the globe’s vast post-industrial landscape, and territories simply consumed by sprawling development.” Drosscape. A. Berger, 2007 “At present, the global landscape is unifying regions through new ecological, cultural and political networks, especially in the wake of recent changes in economic systems. At the beginning of what seems like the era of biofuels, territory is acquiring a new connotation of power; at the same time, the boom in ecologically sensitive programs is bringing public space for the future into the center of debate. When facing this dilemma, contemporary landscaping teams are challenged to establish new frameworks to mediate between the idea of preservation and radical changes in the environment. Our current designation of landscape seems to dilute the dichotomy between what is seen as cultural and what is considered to be natural” The key may lie in the recent understanding of landscape design as the interpretation of a place–understood as the overlapping of infinite layers of culture and natural processes–, while it is still capable of managing and integrating variables from a global perspective. Finally, the threat of change will have become an opportunity: that postindustrial landscape will serve as the framework for the appearance of a new kind of urban space, which can reflect the different working scales, the interdisciplinary and the diversity of programs demanded by the global system.” Total Landscape. Sensitive Alternatives to the Post-Industrial Landscape, Erica Sogbe, Ricardo Devesa, 2014

NEXUS

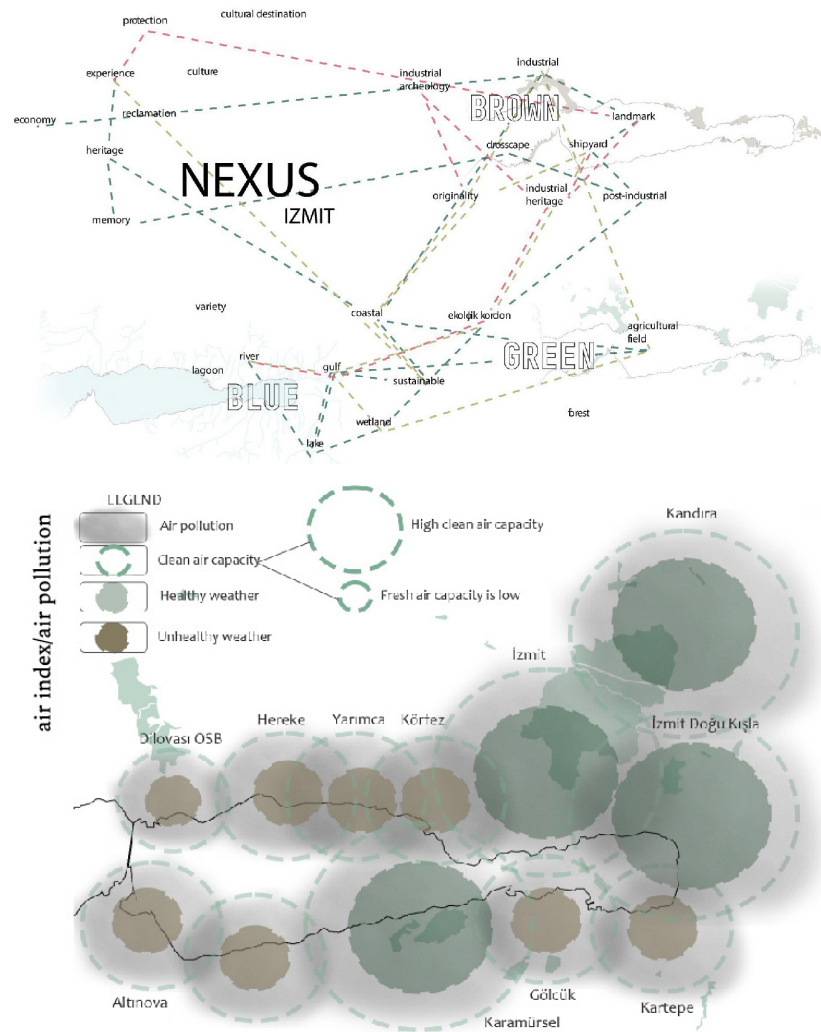
ELIF KOÇ
BARAN YEŞİLGÜL
KÜBRANUR AKKABAK
MELİKE CEMRE OKUYUCU

Development:

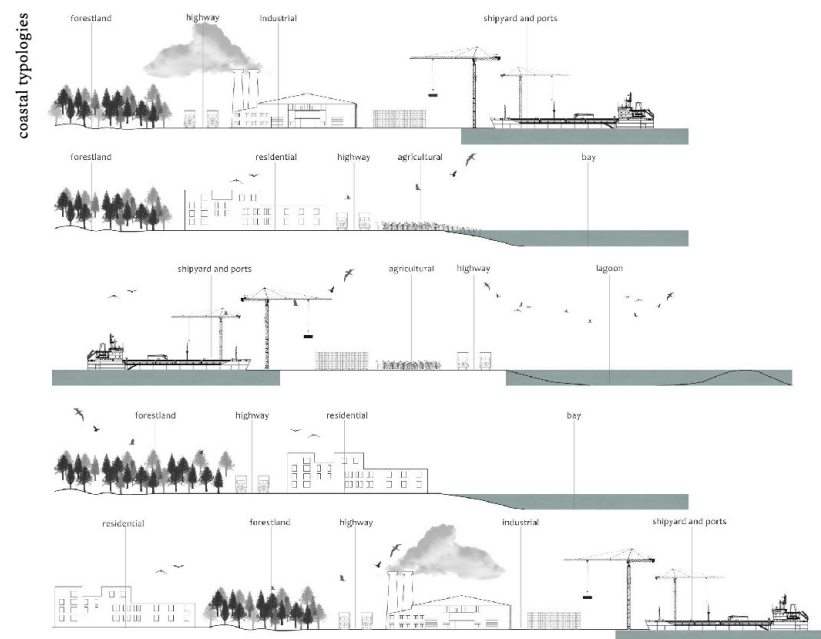
Transformation of areas that remain idle and occupied by industry and industrial zones. Regional development work to strengthen the economic and social infrastructure in the transformed regions.

Principles:

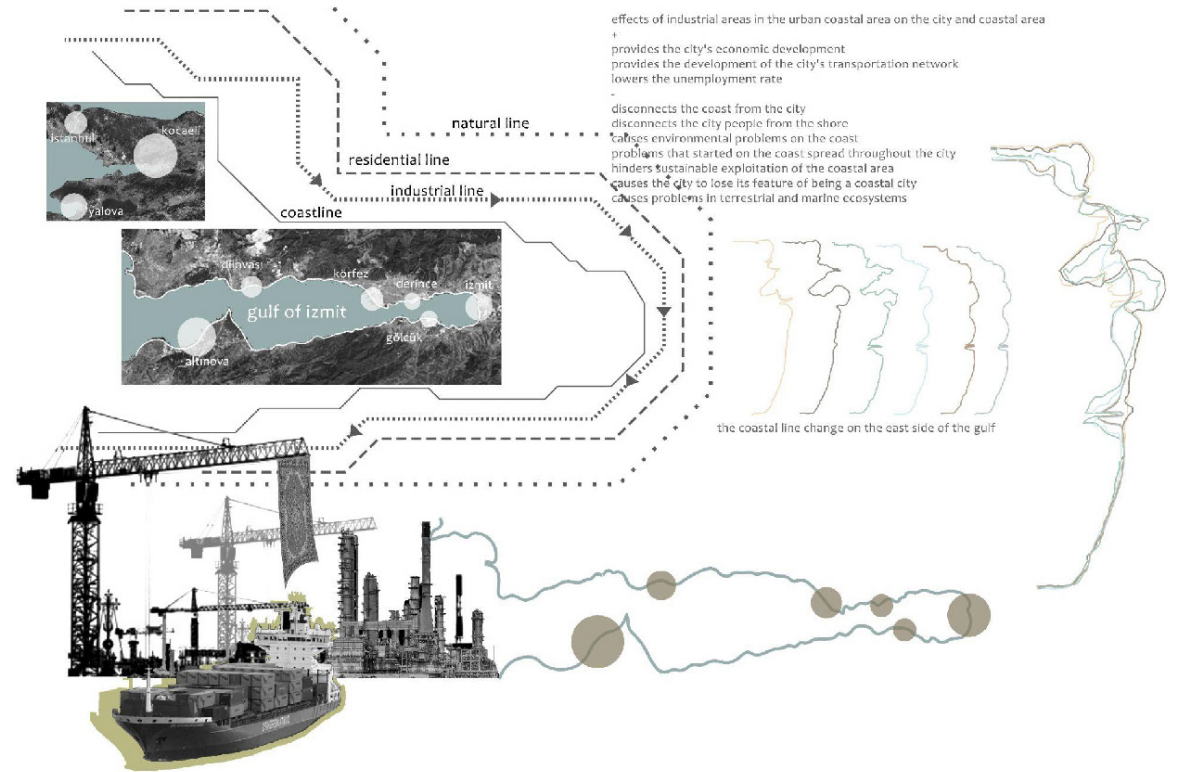
- New bay model
- Global and local
- Strategic planing
- Sustainable designing
- New collabrations and secision mechanism
- Multi-sector city management



There are many types of coastal use in the Gulf of Izmit. At various points, the shoreline begins with various industrial areas such as ahpyards and ports. From these areas towards the city, agriculture, settlement and forest areas follow each other. There are highways at different points between these areas. It caught between the highway and shipyards coming from the Osmangazi bridge around the lagoon region, which has an ecologically important place on the coast. The division of the coast by industrial zones and private properties in various regions adversely affects the continuity of the coast. This creates a barrier effect on the human-water relationship and the gulf ecosystem.



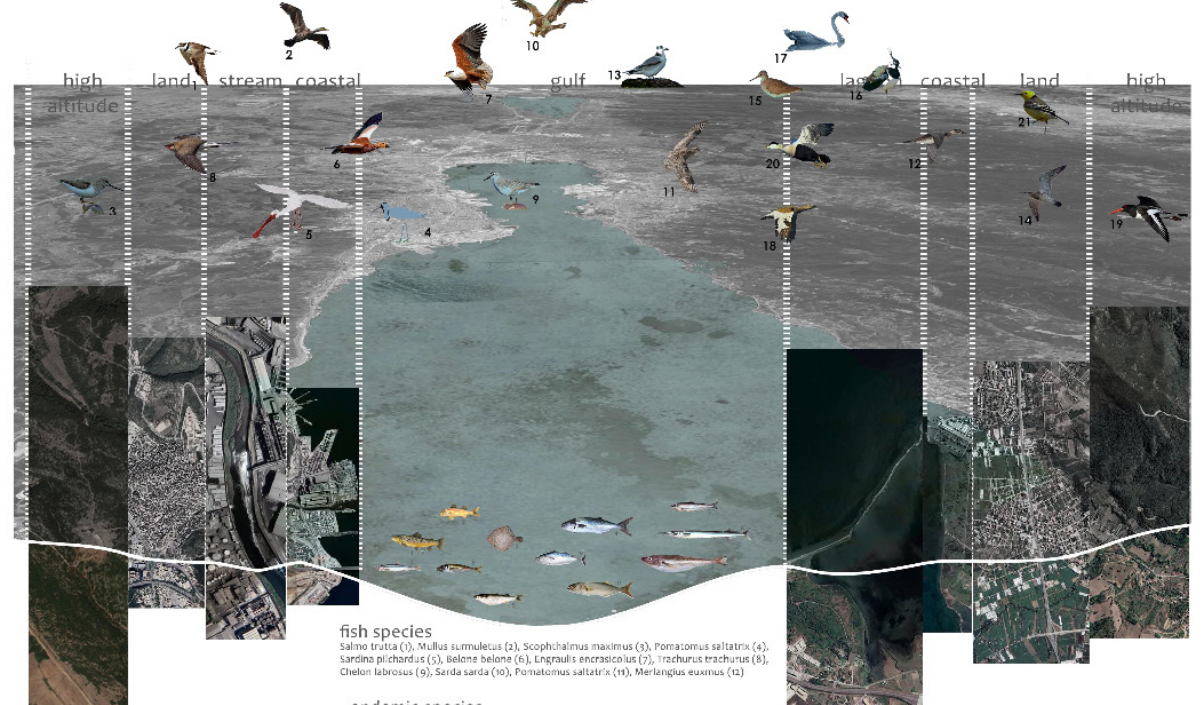
changing landuse from the coast to the urban side



bird species

Charadrius dubius (1), Microcarbo pygmaeus (2), Xenus cinereus (3), Recurvirostra (4), Platalea (5), Anas (6), Pandion haliaetus (7), Glareola pratincola (8), Callidris canutus (9), Aquila heliaca (10), Limosa limosa (-1), Oxyura leucocephala (11), Rissa tridactyla (13), Numenius arquata (14), Tringa totanus (15), Vanellinae (16), Cygnus columbianus (17), Tetrax tetrax (18), L. melopus ostralegus (19), p. s. s. (20), Motacilla (21)

biodiversity on the gulf



fish species

Salmo trutta (1), Mullus surmuletus (2), Scophthalmus maximus (3), Pomatomus saltatrix (4), Sardina pilchardus (5), Belone belone (6), Engraulis encrasicolus (7), Trachurus trachurus (8), Chelon labrosus (9), Sarda sarda (10), Pomatomus saltatrix (11), Merlangius euxinus (12)

endemic species

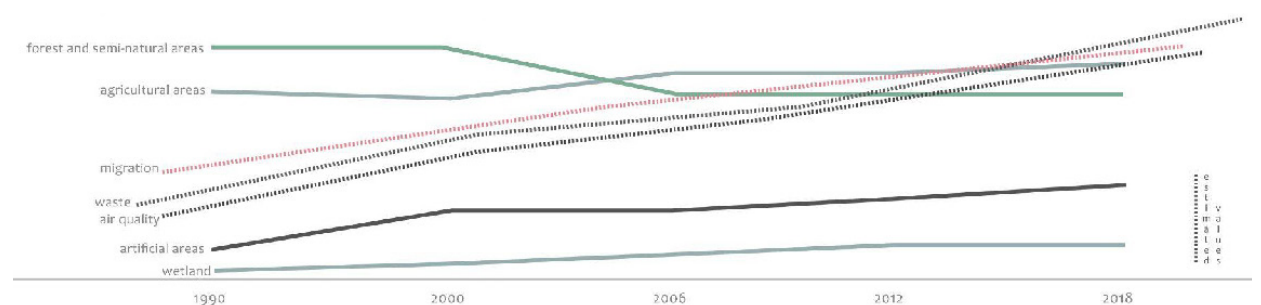
Crocus kellepensis-Berteroa physocarpa-Aubrieta ekinii-Crocus sakariensis-Crocus bifloriformis-Centaurea yalankii subsp. dumani-Hypericum organifolium var. depilatum-Ophrys sphegodes subsp. catalana-Centaurea ertugrullana-Rhaponicoides pythae-Corydalis wendelbolis-purpureobaccata-estuca decolorata-Callium fissurensis-Asperula liliiflora subsp. phrygia-Galanthus plicatus subsp. byzantinus-Anchusa leptophylla subsp. incana-Alkanna tinctoria subsp. glandulosa-Stachys annua subsp. cilicica-Supleurum pendicum-Teraxacum pseudobrachyglossum-Lathyrus czechotianus-Calium trojanum-Abies nordmanniana subsp. equi trojani-Delphinium fissum subsp. anatolicum-Dianthus anconakli-Verbascum abieticola-Triplosporum conacelinum-Olymposicidium caespitosum

non-endemic endangered plants

Carex brixoides L., Plantago argentea Chaix, Corydalis bulbosa (L.) DC. subsp. marschalliana (Pall.) Chater-Serapias parviflora Parl.-Dianthus pinifolius Sibth. et Sm. NT Silene thymifolia Sibth. et Sm.-Fumaria rostellata Knaul-Taraxacum gracilens Dahst.-Ilex aquifolium L. VU Y'dia sibthorpil Boiss.-Leucocjum aestivum L.

endangered taxa

Cirsium polyccephalum DC. (endemic)-Festuca decolorata Marigr.-Dannenb. (endemic)-Lamium purpureum L. var. aznavourii Gand. ex Aznav. (endemic)-Corydalis wendelbol Liden subsp. congesta Liden et Zetterlund (endemic)-Serapias parviflora Parl.-Carex brixoides L.-Corydalis bulbosa (L.) DC. subsp. marschalliana (Pall.) Chater-Crocus pestalozzae Boiss. (endemic)-Fumaria rostellata Knaul-Ilex aquifolium L.-Lathyrus undulatus Boiss. (endemic) Leucocjum aestivum L.-Verbascum biledschikanum Bornn. (endemic)



bay area management plan

development plan

transformation:
transformation of areas that remain idle and occupied by industry and industrial zones

principles:

- 1- new bay model
- 2- global and local
- 3- strategic planning
- 4- sustainable designing
- 5- new collaborations and decision mechanisms
- 6- multi-sector city management

development:
regional development work to strengthen the economic and social infrastructures in the transformed regions

commerce - supporting the trade network

tourism - supporting local tourism

job opportunities - providing and supporting regional and sectoral job opportunities



spaces:
integrating the disconnected areas

blue - guif, lagoon, streams, sapanca lake

green - city parks, natural park, agricultural areas, passive green areas

brown - ports, shipyards, industrial areas



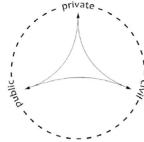
stakeholders:
ensuring balance and cooperation among stakeholders

In order to achieve a common vision, cooperation and coordination should be ensured in relations between institutions and stakeholders. For a sustainable city management model, Kocaeli Municipality should first strengthen its own structure and solve the works. Thematic and sectoral plans should be made and joint service projects should be developed in coordination and cooperation with the stakeholders and institutions in the city. It should develop joint service projects with associations, foundations, private sector and public institutions.

public - kocaeli municipality

private - chambers of commerce and industry

civil - NGO's and local people



strategies:
adoption of rehabilitation strategies to reintroduce the heritages such as industrial areas that have lost their function under the title of urban memory and bring them back into the urban character

remediation

reconciliation

revelation



design:
continuous, diverse and flexible planning strategies should be developed for the Kocaeli gulf region. New planning tools should be developed and spatial development strategies should be defined

continuity - to construct spaces and users as a whole with each other

diversity - programming by providing user, activity and spatial diversity

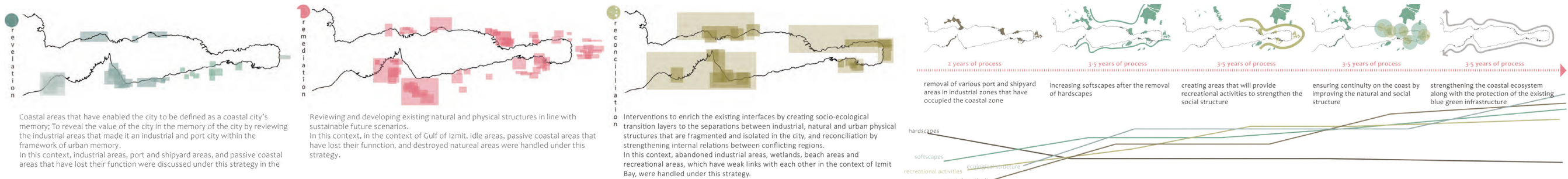
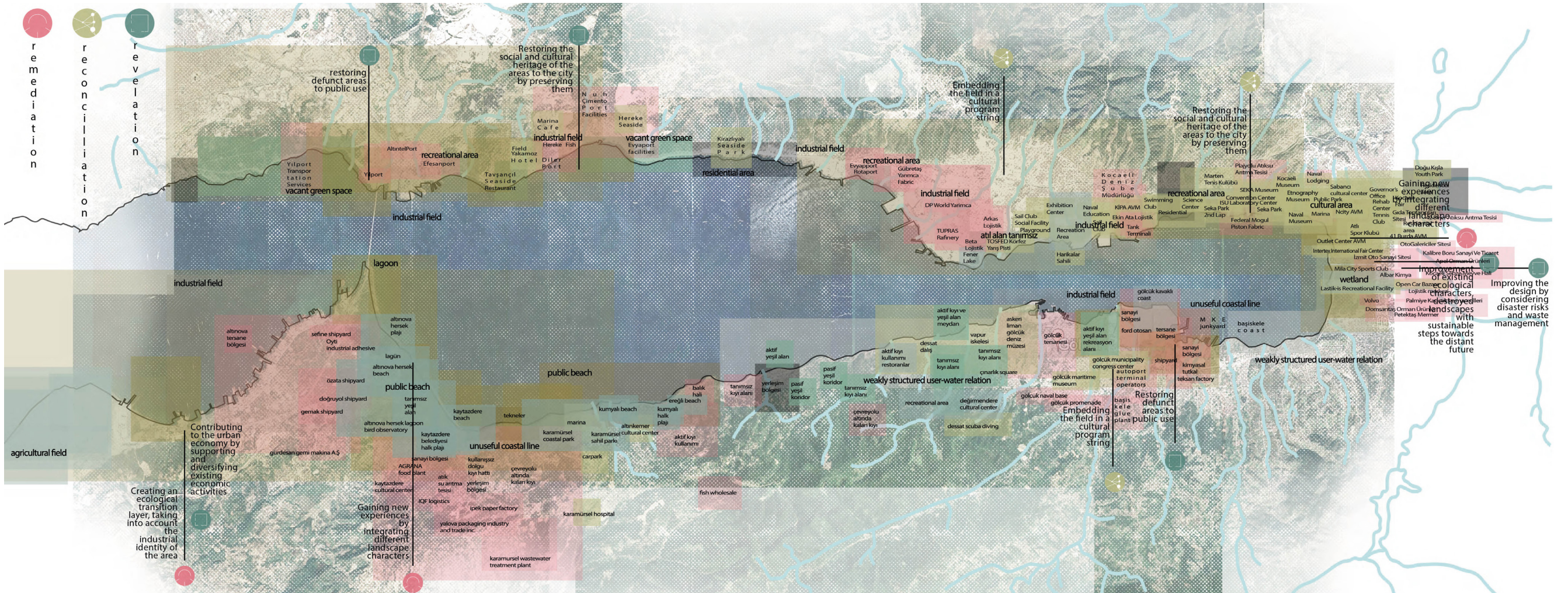
flexibility - be open to change



implementation:
strategic plans of institutions and zoning plans of municipalities should be integrated, planning and implementation integrity should be ensured

economic - public space improvements, providing available funds with a lower budget using determined methods

quick - initiating the project without the need to go through bureaucratic procedures, approvals and licensing

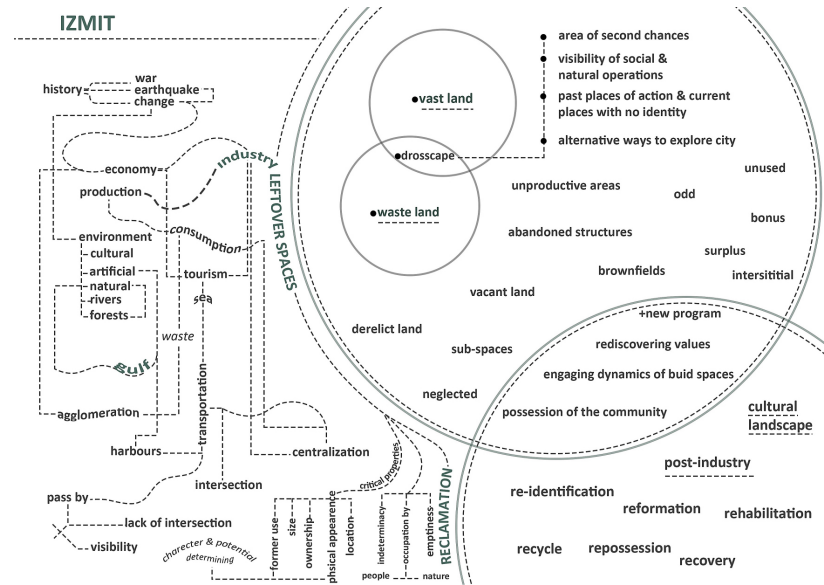


RE-INCARNATION

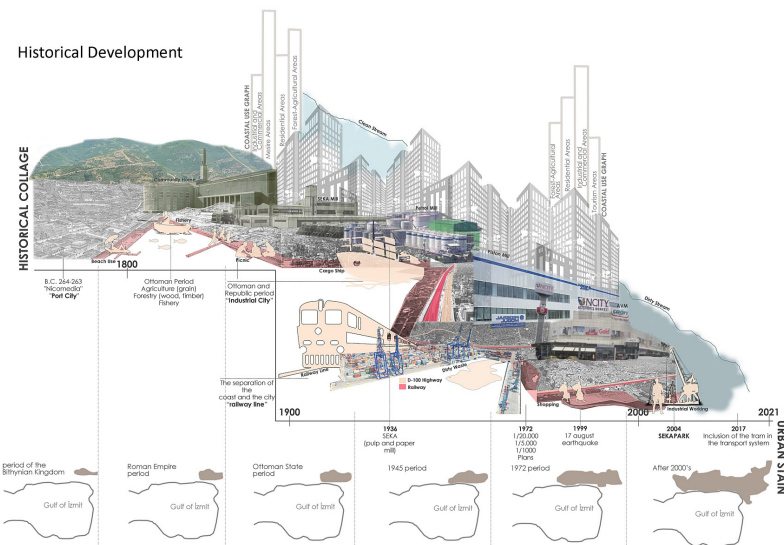
İREM NUR YENER
MERVE DİLARA EZER
MELİSA ALBAYRAK
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How will they reincarnate?

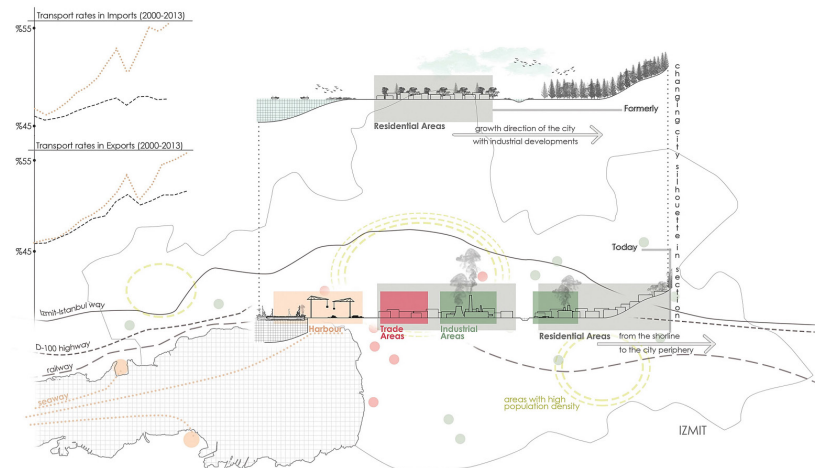
With considering the shoreline as a 'second chance' area and considering these areas as 'an alternative way of exploring the city', 'making social and natural situations visible' in the area.



Historical Development

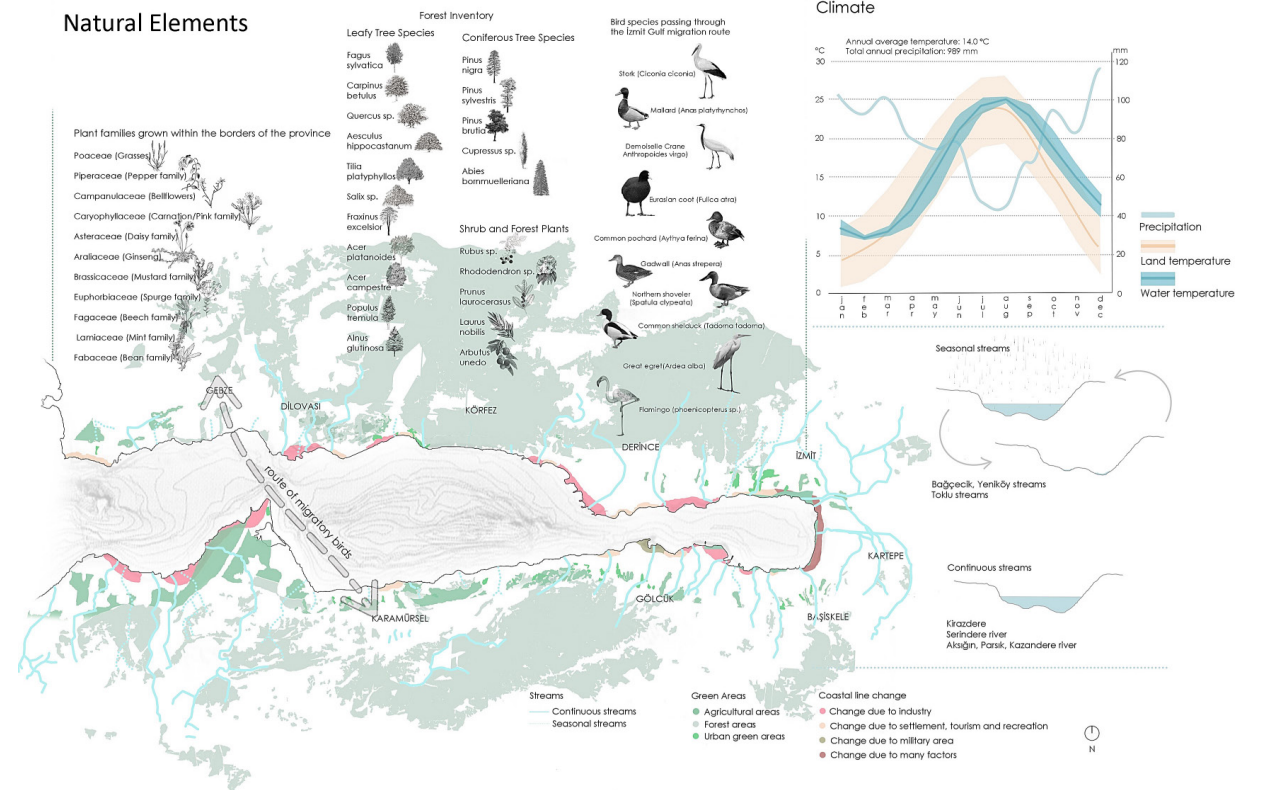


About Izmit

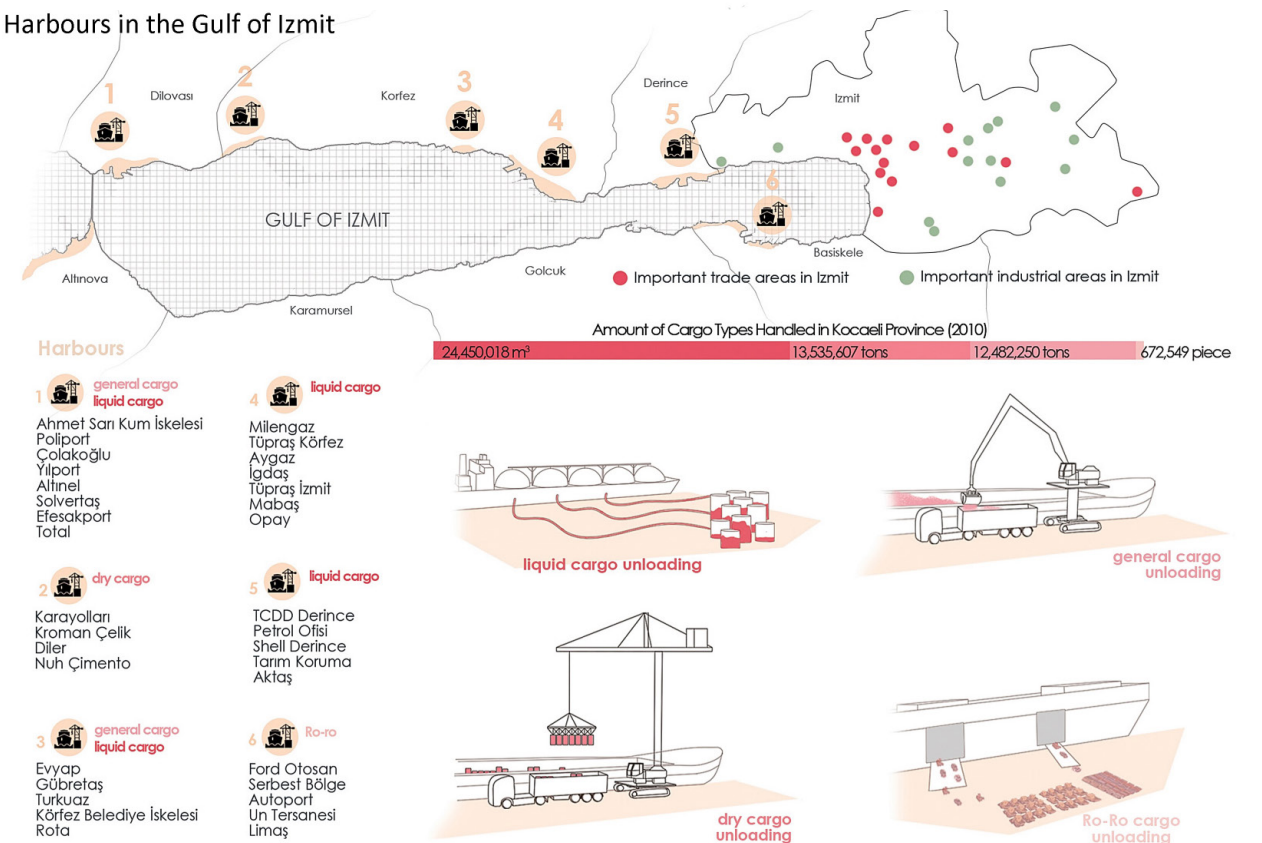


Because of the industrial and commercial activities of the settlements that were located near the coast in the past, the city was pushed towards the city periphery, causing the city to grow from the coast to the periphery. Later, the highways and railways built parallel to the coast also damaged the relationship between the city and the coast. However, when we look at the ratio of the roads used in import and export, the fact that the sea routes are used the most, followed by the highways, supports the commercial and industrial identity of the city.

Natural Elements



Harbours in the Gulf of Izmit

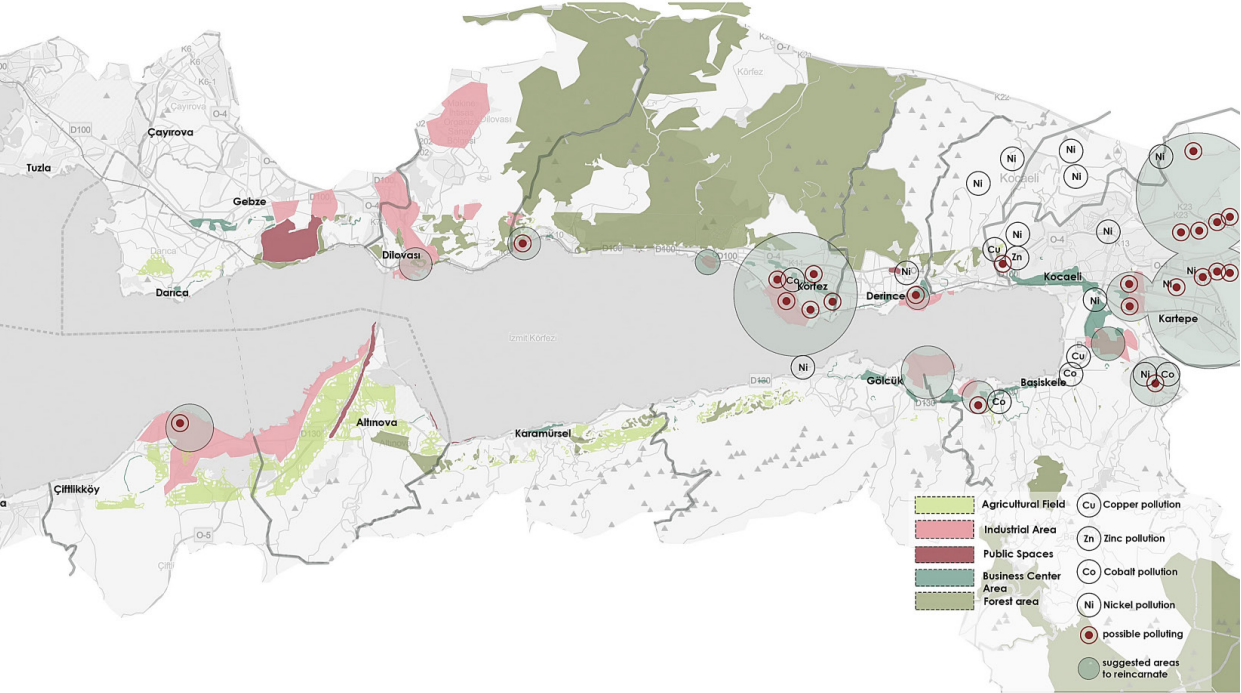


While more than half of the loads unloaded at the ports are sent to the commercial and industrial areas in the city, the rest is sent to the residential and agricultural areas. this cause heavy vehicle traffic in the city center.

Cargo Delivered from Port to City



Areas Whose Possible Function Will Be Changed in The Future Scenario **Primarily**



Goal 1: ECONOMICAL

In the future scenario, it is aimed to encourage new economical activities that are compatible with technology and open to the public in areas that will reincarnate in response to economic activities, which damages the existing ecology and social life and damages its feature of being a coastal city.

Str 1.1: Revival of the activities that make up Izmit's economic identity, which has been suppressed by the industry, in line with the future scenario with technology.

Str 1.2: Keeping the existence in the city in balance with industry and industrial areas, by taking various measures.

Str 1.3: Redesigning the idle areas to be used by workshops and studios.

Str 1.4: Making the production and works done in the proposed new economic resources open to the public and cooperation with the information sharing systems to be created.

Goal 2: ECOLOGICAL

It is aimed to maintain the ecological identity of the city by preserving the currently good ecological values and by saving these areas from the bad effects of the industry in the

Str 2.1: To ensure the planning and management of wastes to ensure ecological sustainability and prevent waste accumulation.

Str 2.2: To support the diversity of flora and fauna in these areas by carrying out breeding studies and site management in accordance with the natural cycle.

Str 2.3: Ensuring ecological sociality by raising awareness of the public about ecological globalization with new programs.

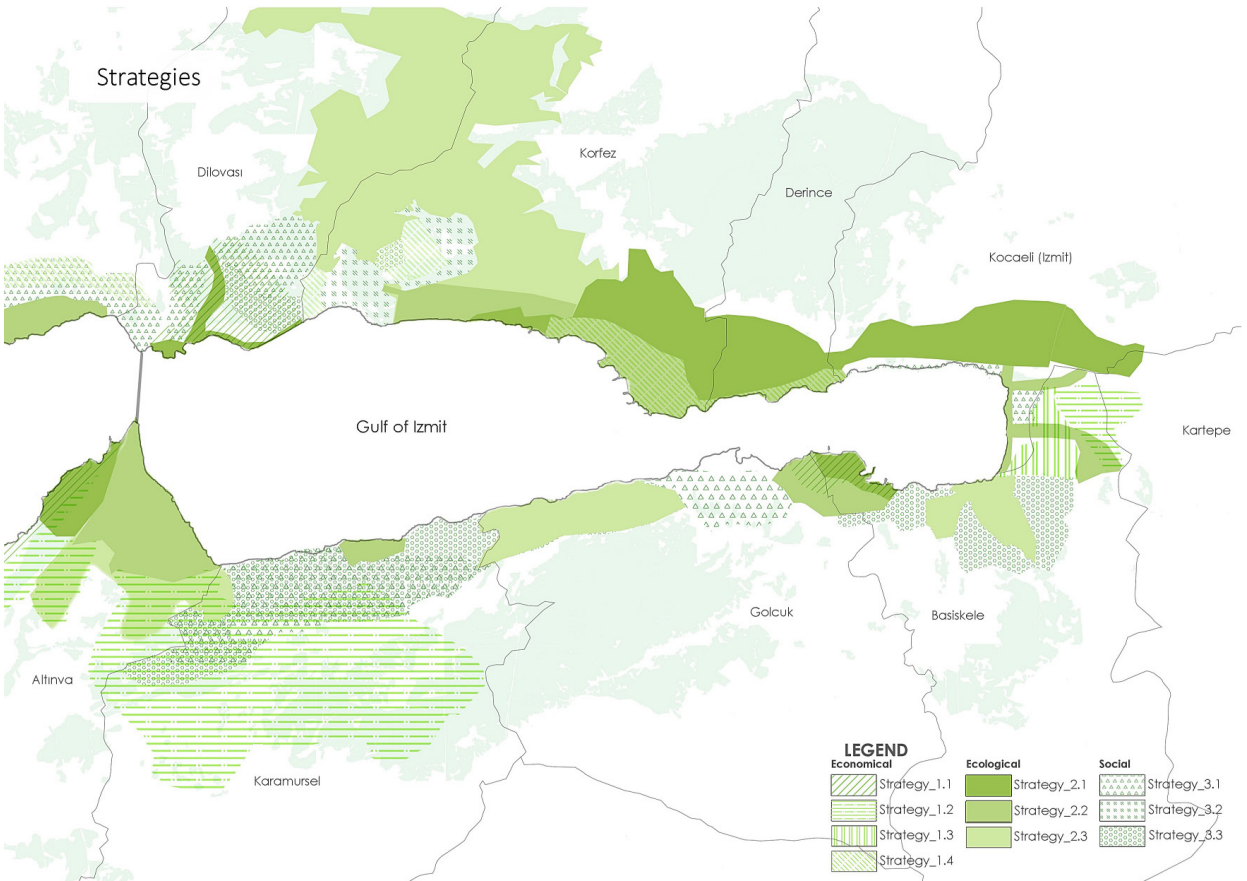
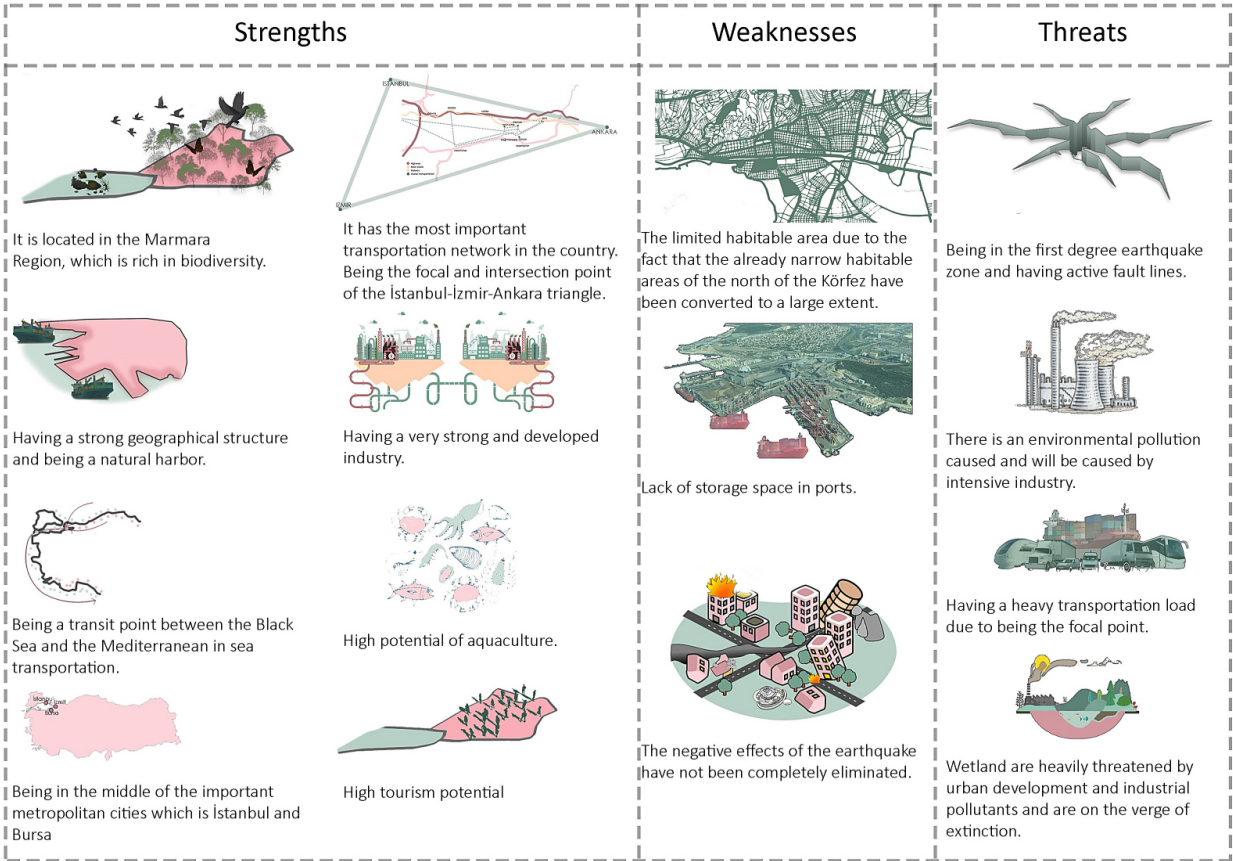
Goal 3: SOCIAL

It is aimed to strengthen the social relations of the people with each other and with the city.

Str 3.1: To create free, outward-looking spaces that will increase the social cohesion of the citizens and carry this social identity of people with each other and with the city to open spaces, not closed spaces.

Str 3.2: Carrying out abstract productions on social relations with the help of institutions such as non-governmental organizations by moving social facilities to open spaces.

Str 2.3: To provide a balance between the two textures by strengthening the social relations between urban and rural textures.



We observed that the current is faster in narrow parts of the bay and slows down where it widens.

The map displays the San Francisco Bay area with various features and data points. A legend in the bottom right corner identifies the following elements:

- Tide 0.15 m/s (indicated by a dashed line)
- Bird's migration (indicated by a solid line)
- Fall (indicated by a light orange shaded area)
- Spring (indicated by a light red shaded area)
- Streams (indicated by blue lines)
- Wind (indicated by a black line)

The map shows the bay's coastline, major waterways, and the distribution of bird migration patterns. The current is observed to be faster in narrow parts of the bay and slows down where it widens.

quaternary formation is the lower layer of this accumulation.

PLATEAU KOCAELI

0 5 km

Bursa Harman

Bursa Lake Delta

36°N fault line

Mountain Samanlı

Quaternary formations

Water

36°N fault line

Map of the San Francisco Peninsula showing land use patterns. The map is color-coded: light green for Residential, dark green for Forest, yellow for Agricultural/Low Density, orange for Industrial/High Density, red for Port, and brown for Park/Beach. Major roads like Highway 101, Highway 92, and Highway 1 are shown. The map includes a scale bar (0 to 10 miles) and a north arrow.

The map displays the study area in the north and the location of the study area in the south. The study area is located in the north, and the location of the study area is in the south. The map includes a legend for streams (blue lines) and loading & unloading points (grey circles). The study area is located in the north, and the location of the study area is in the south.

IP-1
FOREST / INDUSTRY / COAST

IP-2
SETTLEMENTS / INDUSTRY / COAST

IP-3
COAST / INDUSTRY / WATER

IP-4
EASTERN GULF / WETLAND / AGRICULTURE

IP-5
AGRICULTURE / INDUSTRY / HIGHWAY

LEGEND

- Green Area
- Settlements
- Agriculture
- Fair / Shopping Mall
- Industry
- Water

49 Family

İzmit Floristik Liste

[illegible]

1. *Monopeltis* *capensis*
 2. *Amphispeltis*
 3. *Leptotyphlops*
 4. *Scaphiophis*
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There are no areas with very rare animal species living in the region within the borders of Kocaeli.

Common fish species

It can swim at a speed of 20 km per hour and one of the fastest fish in the ocean is one. Pre-industrialization It was found in the Gulf of Izmit.

**Risk of extinction
fauna elements.**

B1 - Stanchion
There is a high risk of extinction in the wild. 30% decrease in population in the last 10 years. It is seen intermittently in Winter in Izmit Wetland.

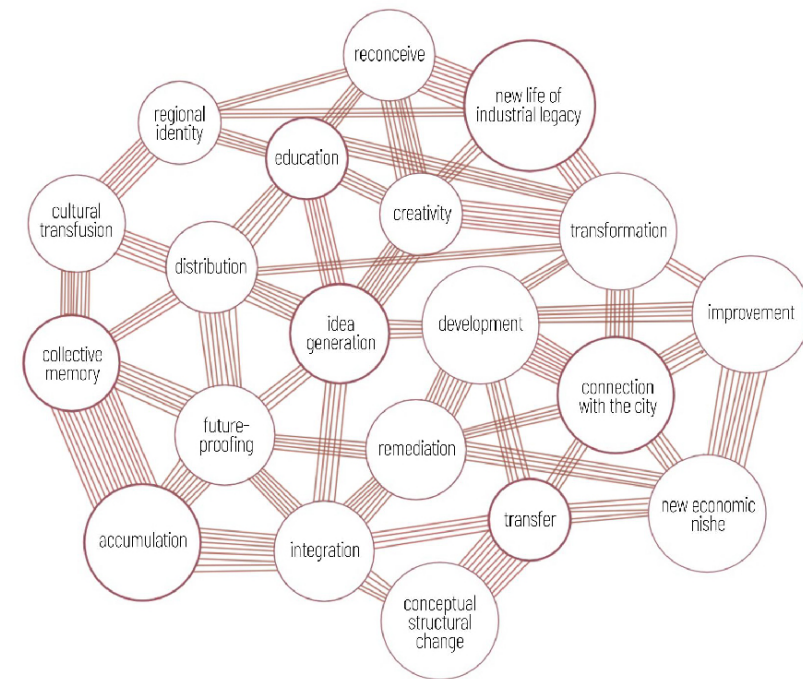
Its extinction is endangered in nature in the near future. It lives in large reeds in fresh and brackish waters. It can always be seen in Iztim Wetland.

B3 - Lapwing
There is a high risk of extinction in the wild. A decrease of 30% in its population in the last 10 years. It is under protection on a European scale. It is seen in the Izmit wetland

E3 - Great Sandpiper
It is under protection on a global scale.
Its extinction is under threat in nature in
the near future. Migration time is
observed in limit wetland.

As terrestrial species and assemblages of the same species; There are reptiles, birds, mammals.

We adopted the approach that disintegration is necessary in order for growth to be achieved, and we supported our approach by combining the fragmented structure of the area with the analogy of campus, which is an educational space.



GOLCUK ZONE

Since Gölçük region has a settlement character in the area close to the coast it has been suggested that the local people be considered as the primary user in this region and the construction of public open and closed spaces that have an active relationship with the coast. Due to the potential of the region to interact with basic education institutions, it is suggested that the region should allow information transfer activities that require continuity, such as the membership system, in various venues. It has been proposed to create ponds on the large rivers that emptied into the eastern shore of the Gulf and its immediate surroundings, in sections suitable for geomorphological structure. Due to the fact that the region is on the meable areas, which are inland due to changes in sea level, should be protected and designed as a disaster assembly area.

HERSEK ZONE

An important part of the ecological existence of the Gulf of İzmit is the preservation of the natural character of Herzogovina. Therefore, in the future scenario, preserving this feature of Herzegovina provides opportunity to experience nature in the campus setting, and the opportunity to learn based on observation.

EASTERN GULF ZONE

It is the area that shows the eographical accumulation character of the bay most intensely. the region puts a great burden on the region as the first settlements were established in İzmit, being the first development area of the industry, being the commercial center of the city today and hosting intense functions. Considering the ground of the region, the coasta environment and te settlements being in the alluvial plain makes the region open to flood risk. the wetlands in the coastal partof the region have been partially dried, filled and the city's oxygen supply has been largely destroyed. It has been proposed to revitalize the destroyed wetland character in order to provide natural areas that allow accumulation by reducing the ground depression of the region. It has been proposed to remove a large part of the auto industry, which covers a large area of the region. It is envisaged that massive structures such as the shopping mall exhibition center located on the coast will work in an integrated manner with open public spaces.

SEKA ZONE

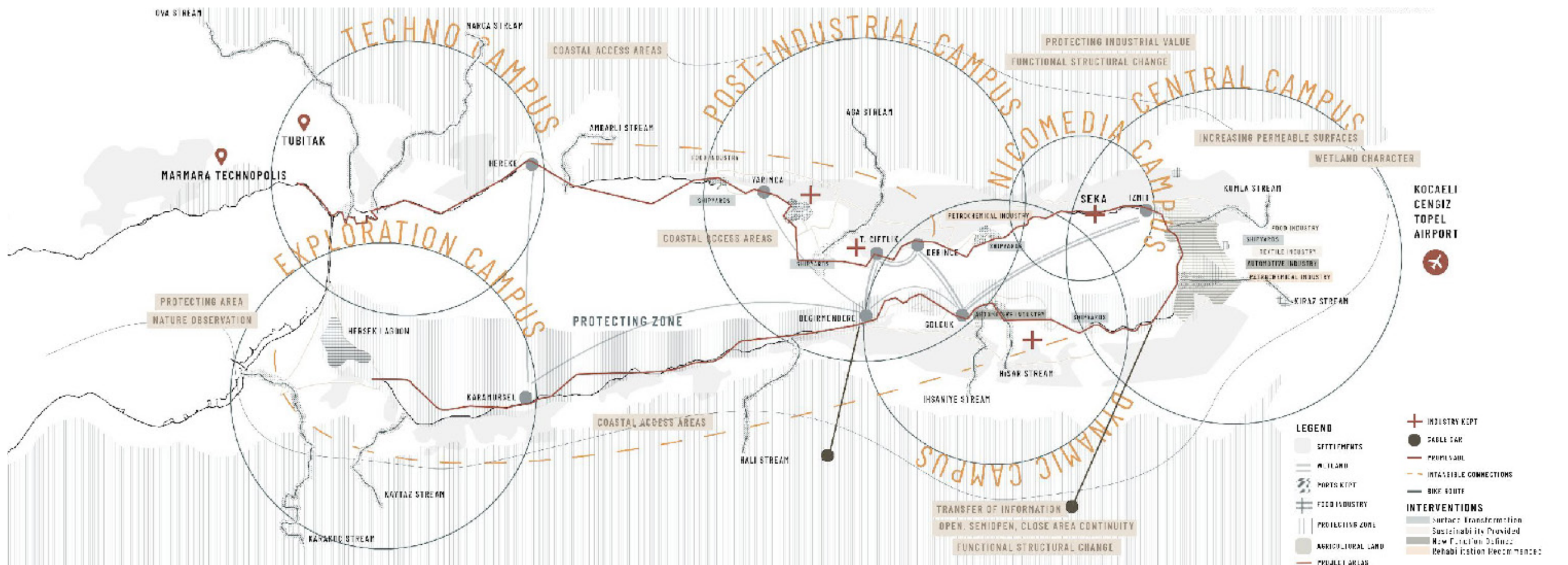
It is the region that houses the remains of Seka, one of the first factories of İzmit. In order to preserve the industrial and architectural value of the ruins. it has been suggested to keep them in the area and to design open spaces that can interact with the users. new activity areas will be offered to users by taking advantage of the large surface area of the region.

KORFEZ ZONE

This region is one of the oldest settlements of İzmit. This region, where educational institutions are located, takes its name from the silk woven hereke carpet, which is one of the important values of İzmit. in the region, which is compressed by the mountains and the sea and not suitable for settlement; Since it is foreseen that in the future scenario, physical space will not ve needed as much as now in the esucation sector, the congestion will be eliminated by removing some of the structures of educational institutions.

DERINCE ZONE

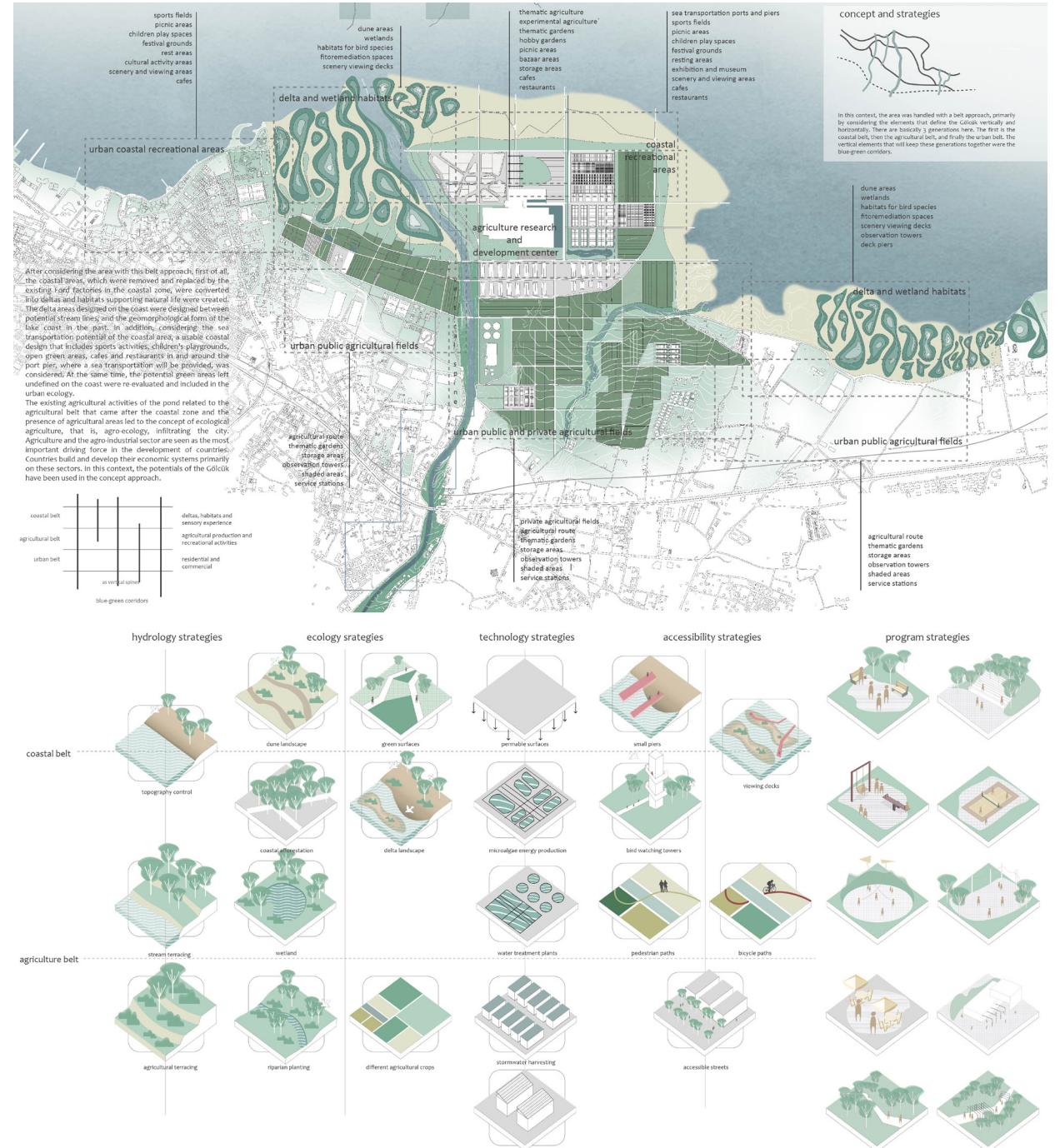
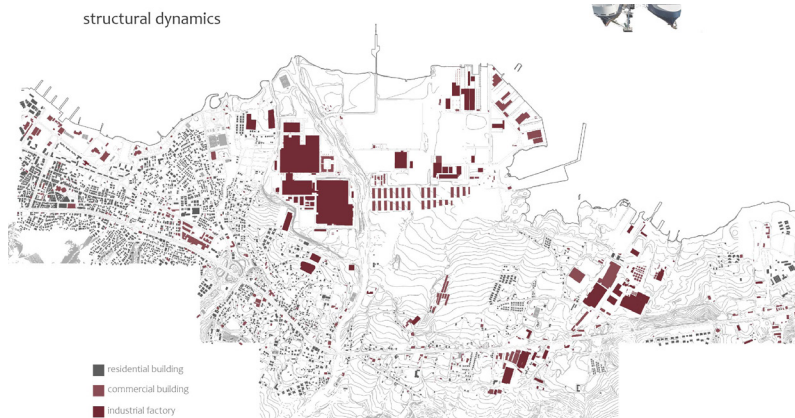
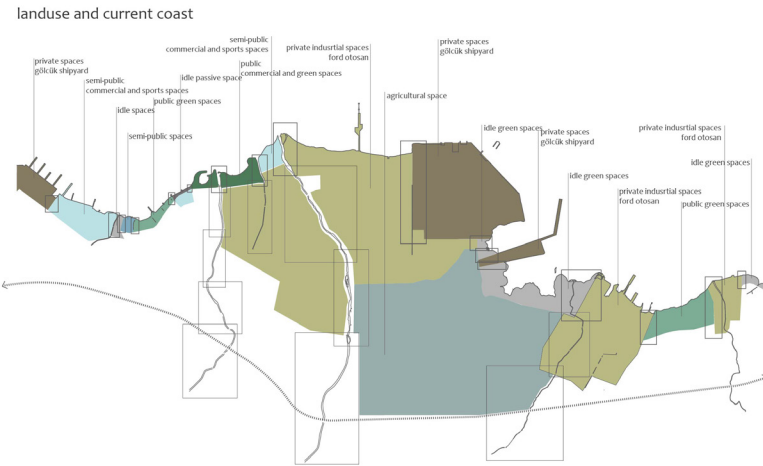
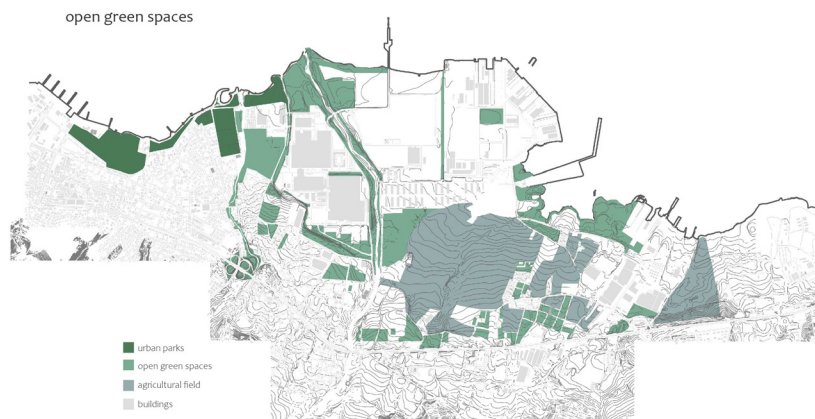
Derince, which takes its name from the deepest place on the coast; it is a very functional area where railway, sea and land transportatn networks intersect and contains industrial, military and port areas. the region, which has been filled by the coast over time, is the place where the industrial zones occupy the coast most continuously. In the past, the industrial zone, which reached to the inner parts, was turned into a residential area with the change of plan. Considering the plan change made in the future scenario, it is investigated to design areas accessible to the coast by cutting the industrial zone that heavily occupies the coast.



NEXUS GÖLCÜK

KÜBRANUR AKKABAK

Looking at the design proposal, there is a dune coastal structure, one of the delta habitats, consisting of aquatic vegetation, newly emerged vegetation, reeds, wet grasses and dry grasses as well as meadows in the coastal area around Hisar Stream. In addition to these, agricultural areas integrated with these areas and the coast are seen. The setup of all areas was built with a process-based design model. In addition, the current flood risk of Gölcük has been taken into consideration and it has been shown how the use of land will change at different water levels.

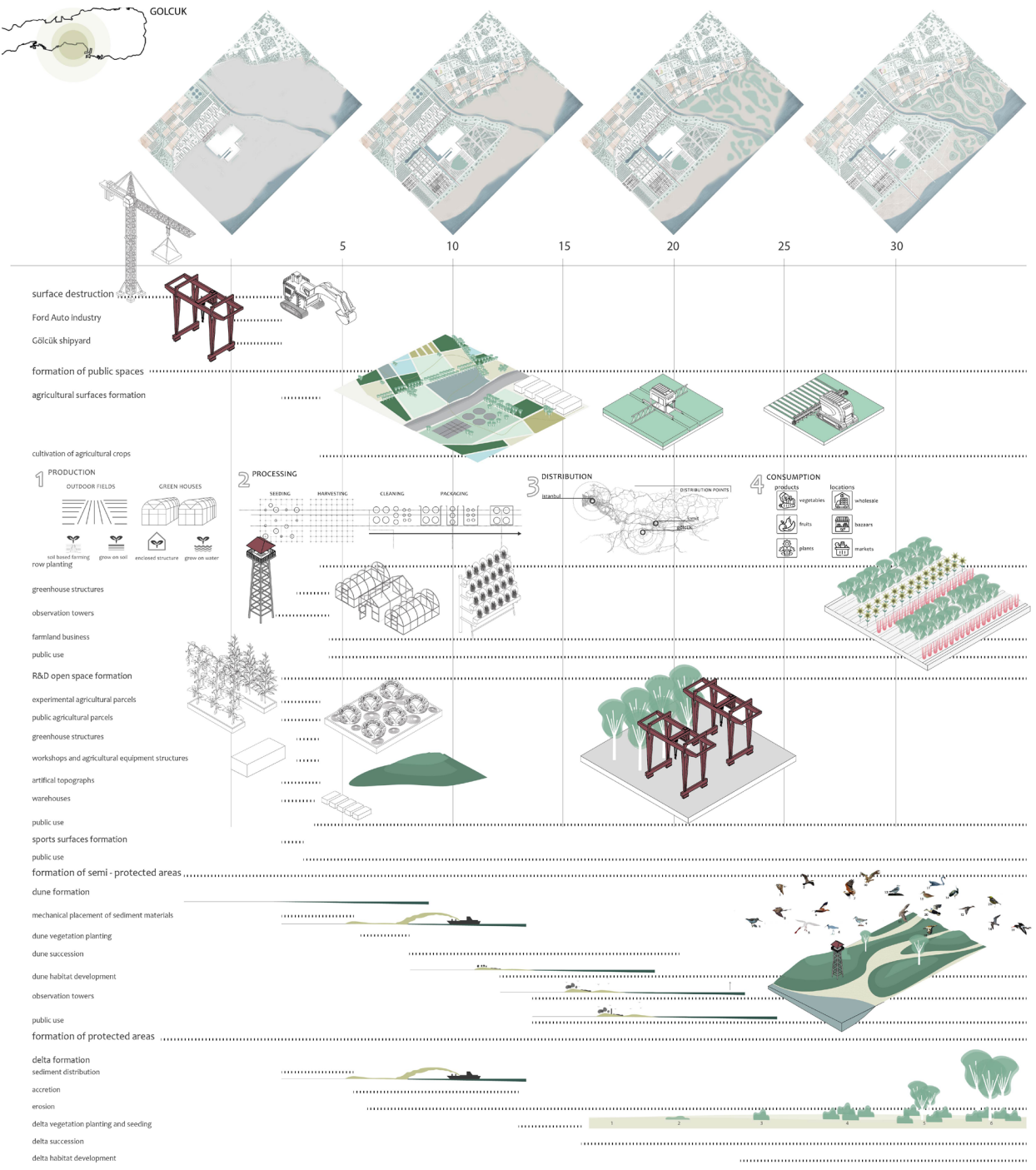
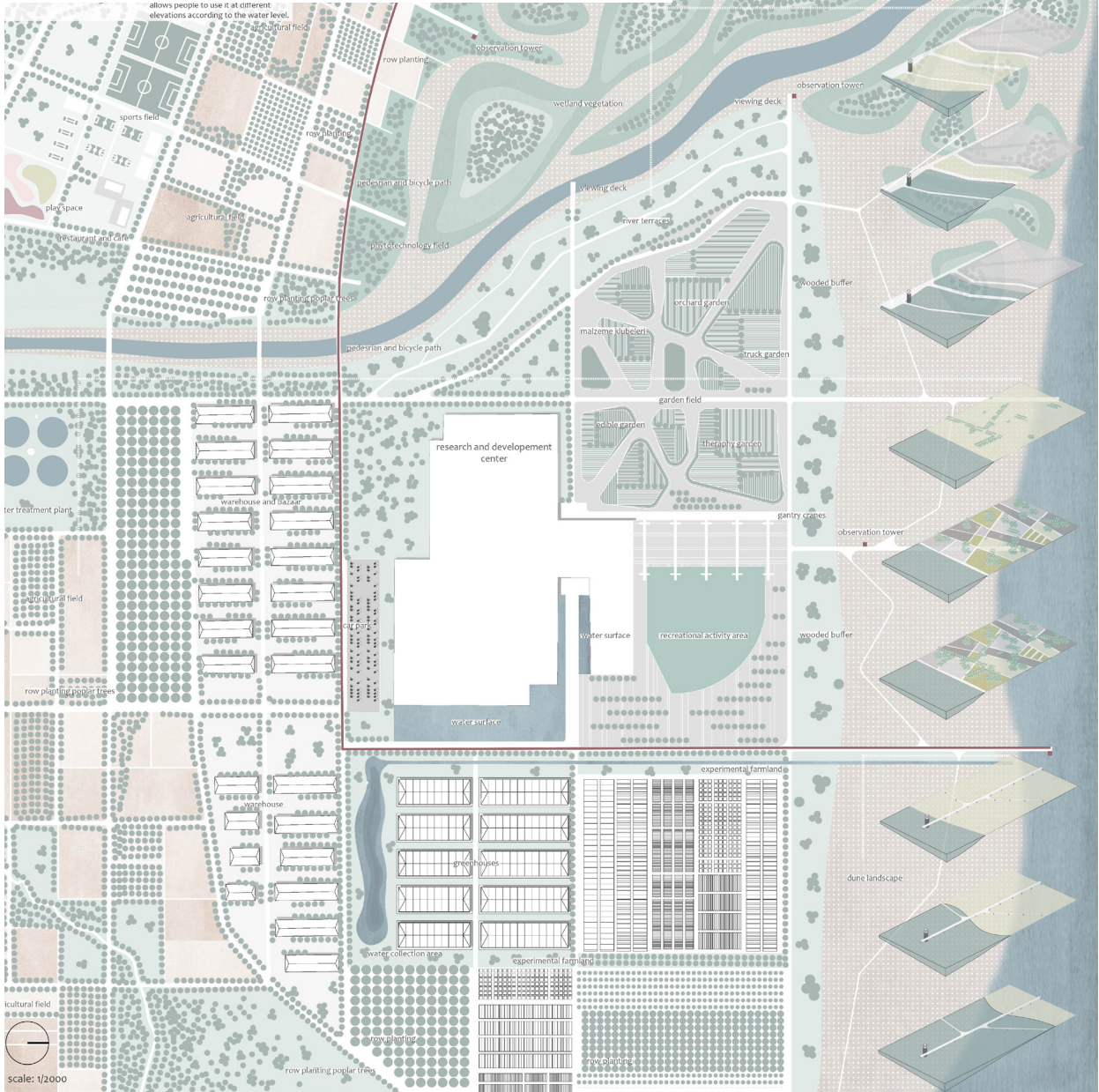


Ford auto industry factories established in the coastal region, which is one of the important points in Gölcük, is one of the largest commercial production factories. Since the lake is located on the northern Anatolian fault line, it is seen as an earthquake risk area. The coast, which is filled later, is at risk of being submerged due to the rise in sea level that comes with climate change. The main element that forms the blue-green system of the pond and is frequented by the birds is the streams. However, the wastes from the industrial buildings located very close to the stream pollute this stream. If the open green areas of the pond are examined, there are city parks on the beach. In addition, there are undefined areas with various potentials on the coast. Behind the Ford factory is a large area of farmland. Here, it shows two different modes of production in production, such as industrial and agricultural production.

Decisions were made such as improving the green areas on the existing stream lines, revealing the ecological values of the undefined potential green areas, and finally transforming the existing industrial zone factory areas under a compromise strategy. In this context, the area was handled with the belt approach, which primarily deals with the elements that define the Gölcük vertically and horizontally. There are basically 3 generations here. The first is the coastal belt, then the agricultural belt, and finally the urban belt. The vertical elements that will keep these generations together were the blue-green corridors.

After considering the area with this belt approach, first of all, the coastal areas, which were removed and replaced by the existing Ford factories in the coastal zone, were converted into deltas and habitats supporting natural life were created. The delta areas designed on the coast were designed between potential stream lines, and the geomorphological form of the lake coast in the past. In addition, considering the sea transportation potential of the coastal area, a usable coastal design that includes sports activities, children's playgrounds, open green areas, cafes and restaurants in and around the port pier, where a sea transportation will be provided, was considered. At the same time, the potential green areas left undefined on the coast were re-evaluated and included in the urban ecology.

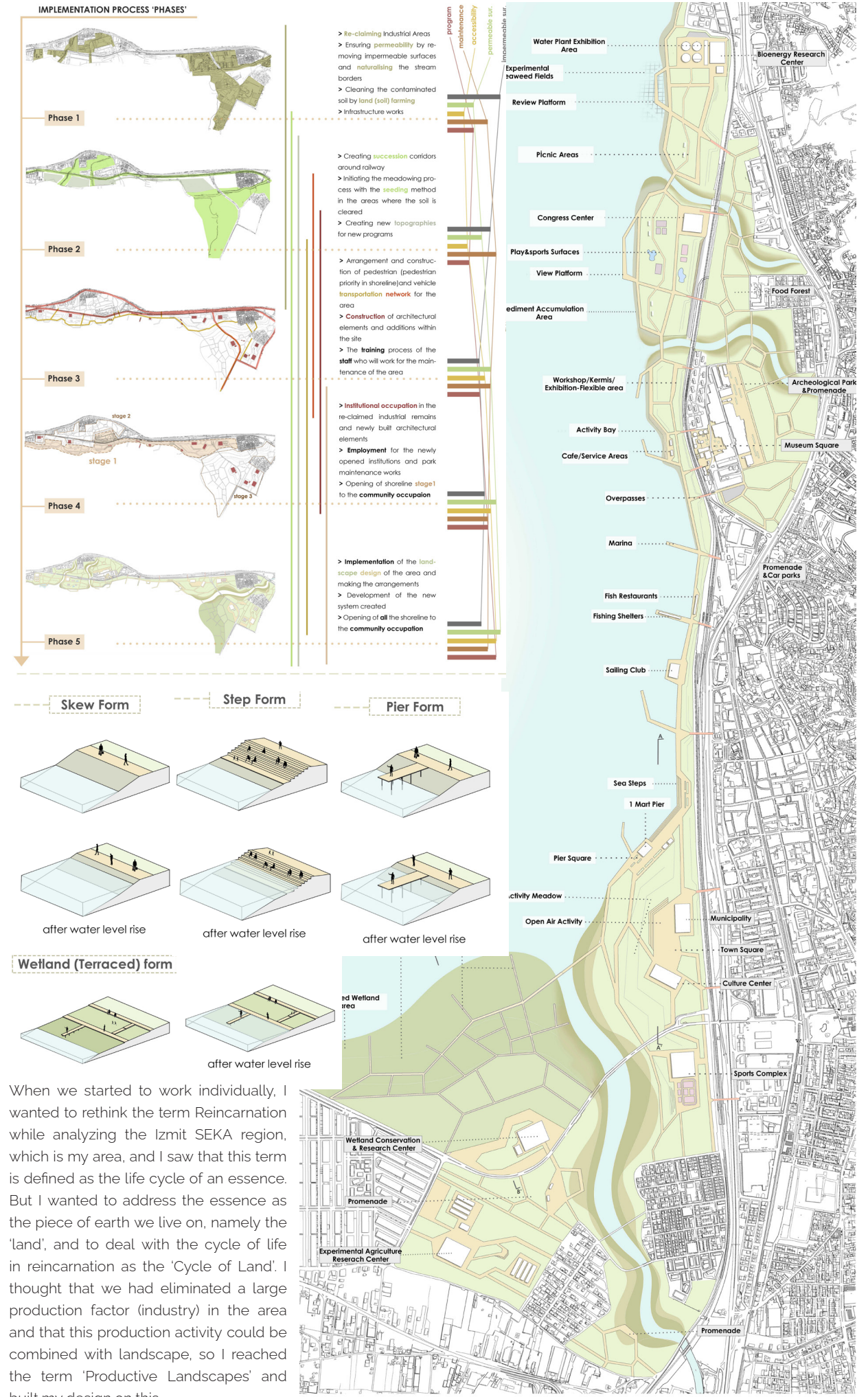
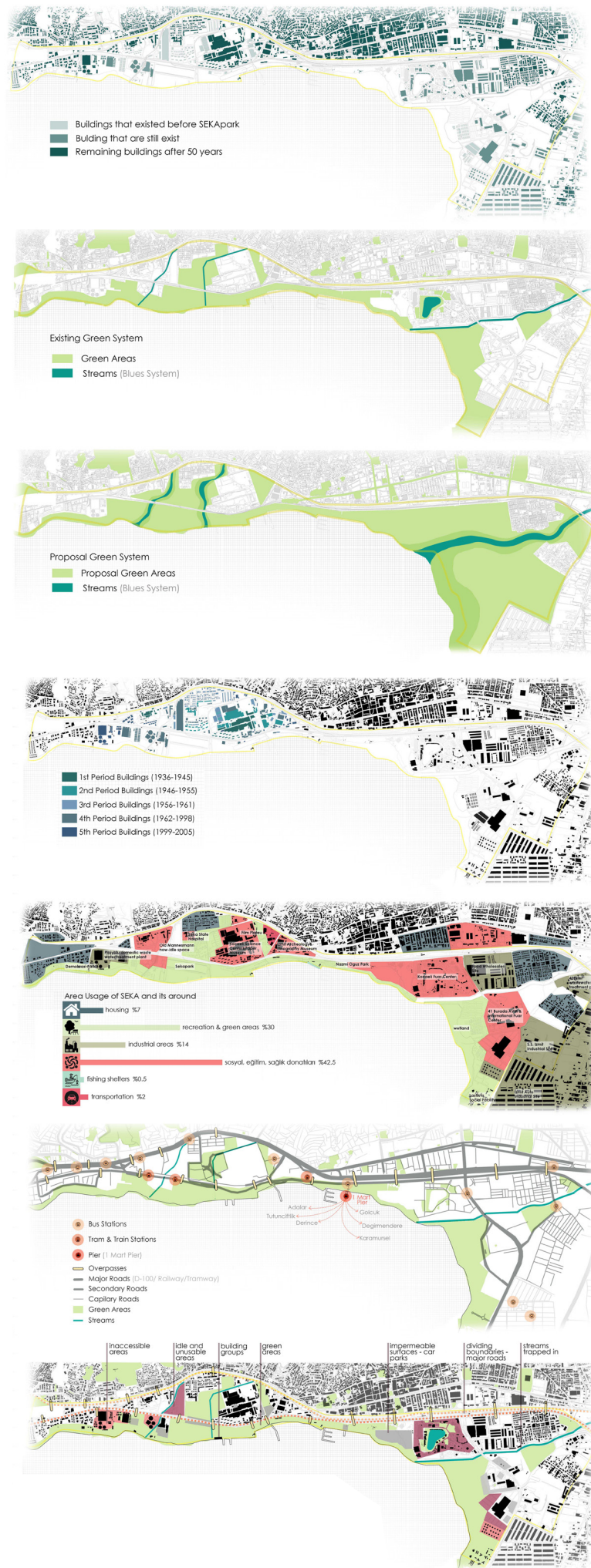
Three basic improvement strategies have been determined, which will also include upper-scale decisions, in order to improve, correct and improve the area. The first is phytoremediation, which is a type of phytotechnology under the remediation strategy. With the phytoremediation method, it is aimed to use plants and other related soil microbes to reduce the toxic effects of pollutants in the environment, and to filter wastes such as agriculture into the water. The second breeding strategy is succession, which is under the heading of reconciliation strategy. It is aimed to reveal the ecological values of the region with the change process in the species structure of the ecological community in a certain period of time. Finally, the concept of agricultural ecology, which aims to reconcile with the industrial identity of the region, is discussed.



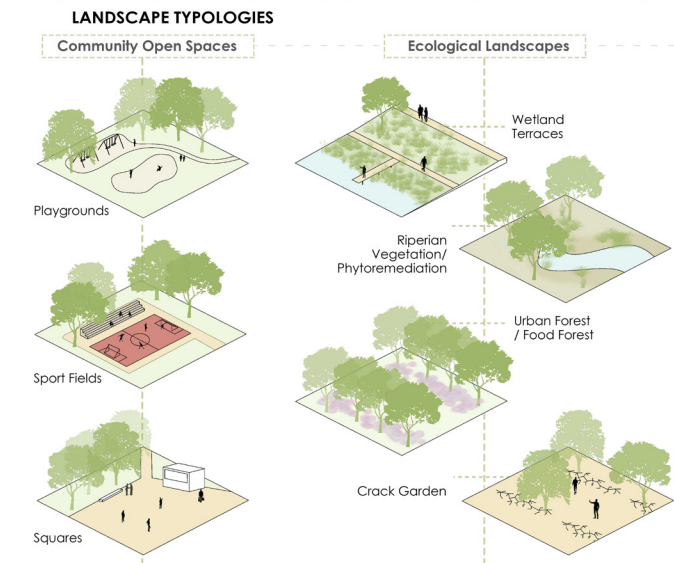
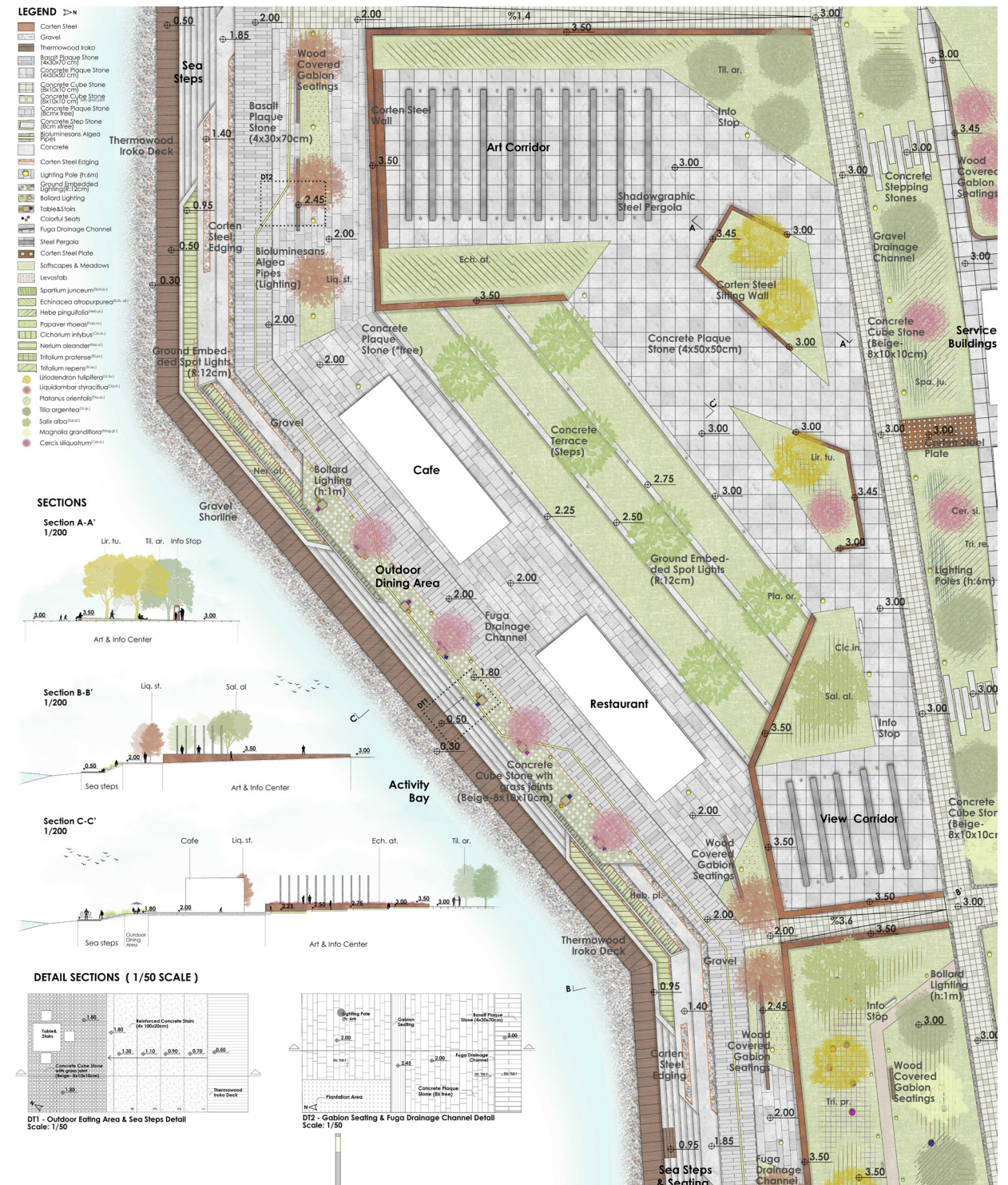
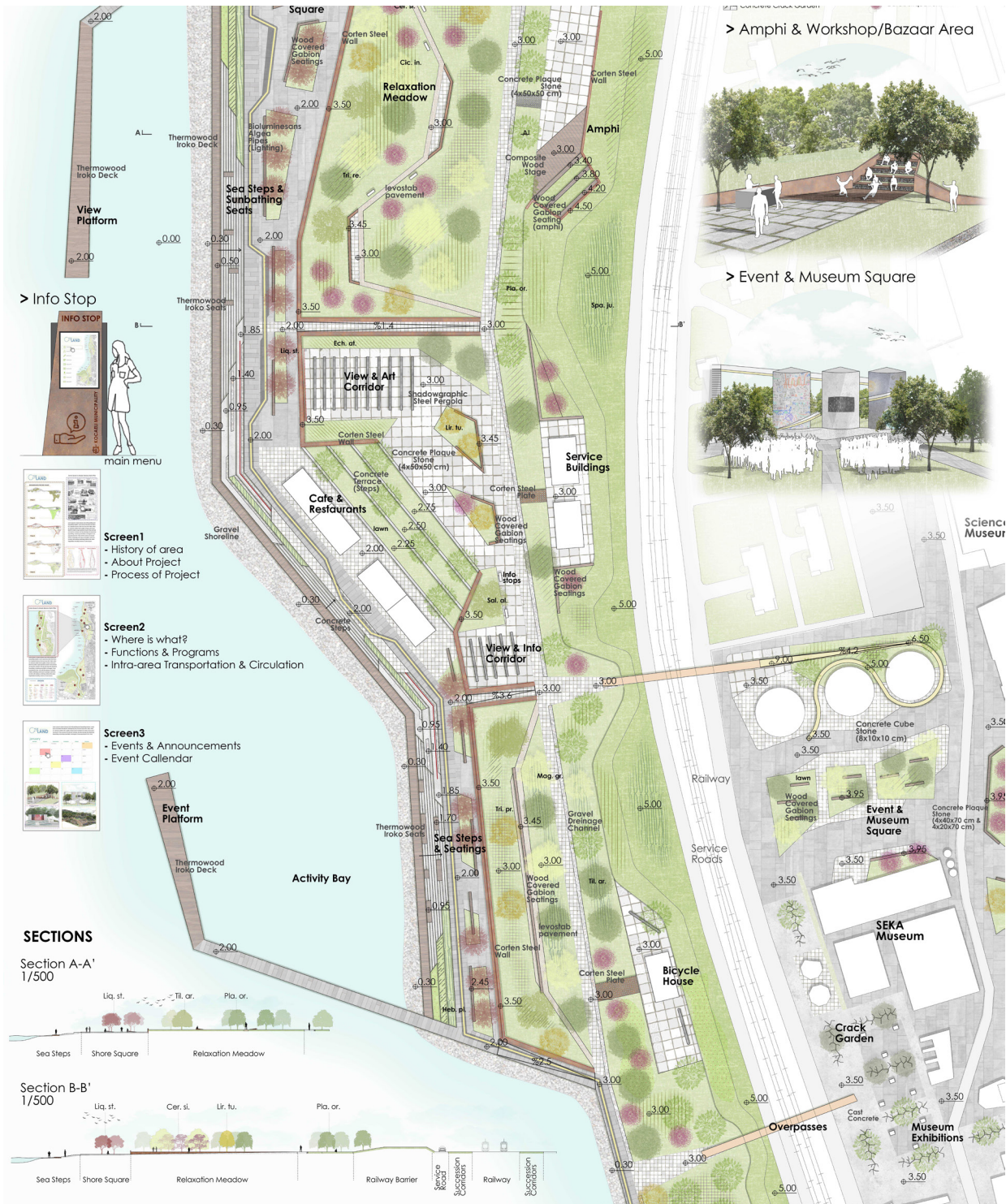
CYCLE OF LAND

MERVE DILARA EZER

drosscape areas, where industry and factories will be removed after 50 years, can be considered as 'second chance areas' and 'social and natural operations can be made visible' in these areas as a group. Based on these ideas, we found the term 'Reincarnation' and based on this term, we tried to analyze the situations on the area by questioning as how they were, how they are and how they will be.

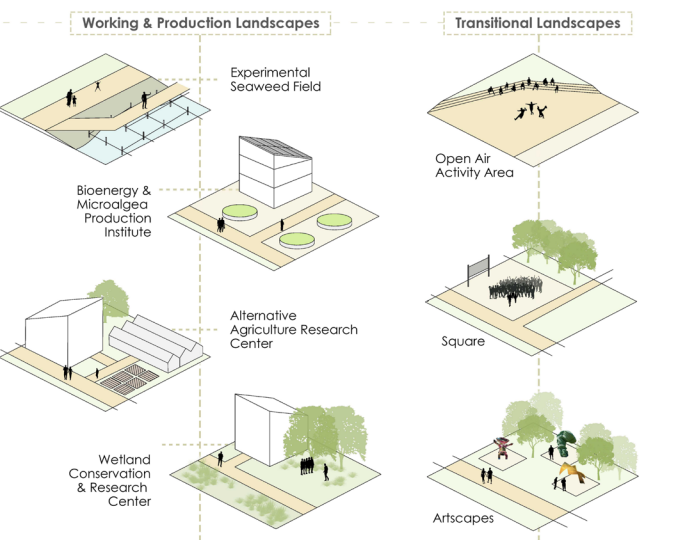


When we started to work individually, I wanted to rethink the term Reincarnation while analyzing the Izmit SEKA region, which is my area, and I saw that this term is defined as the life cycle of an essence. But I wanted to address the essence as the piece of earth we live on, namely the 'land', and to deal with the cycle of life in reincarnation as the 'Cycle of Land'. I thought that we had eliminated a large production factor (industry) in the area and that this production activity could be combined with landscape, so I reached the term 'Productive Landscapes' and built my design on this.



After the analyses, while the concept plan was being created, it was tried to create new functions in the area by considering what the situations in the area will be after 50 years under the headings of energy, science/culture, food, ecological values and sociability by emphasizing what will be produced in this area in the new situation, starting from the term productive landscape. These are: bioenergy research center, algae & seaweed production centers under the energy heading; It consists of areas and structures such as wetland conservation and research center, SEKA, science and archeology museum and treatment pool digital art area under the title of science/culture, and the functions that develop around them.

Apart from this, it consists of edible landscape areas, city and coastal squares, urban forest and woodland, wetland terraces, rehabilitated and naturalized stream lines under the headings of ecology, food and sociality. In addition to all these, a large-scale productive landscape matrix is formed by interrelating the proposed functions. In this productive landscape matrix, in addition to functions such as sports, games, gathering, chatting and relaxation; research and production centers have taken their place in line with the future fiction that foresees the continuation and development of the information and technology age. In the coastal line between the rigid texture of the city and the dynamism of the sea, the design was tried to be shaped based on the form called dynamic rigidity, which I created from the combination of both textures.



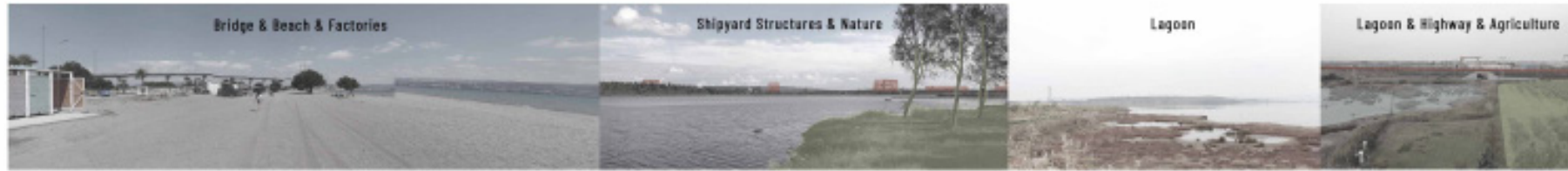
ZEHRA BETÜL DOĞAN

ZEHRA BETÜL DOĞAN

The basic conceptual approach of the concept is named as "Public Campus", which offers educational spaces that combine post-industrial and open spaces in the public space. The concept is about the transformation of postindustrial spaces for educational purposes. The reason for using the metaphor of campus is that the fragmentary structure of the gulf line is similar to the fact that the campus consists of units with different functions. Along the gulf line, campus types are emerging that are customized according to the potential of each area. One of the aims of the concept is to improve, reveal and incorporate ecological values into the system in all campuses.



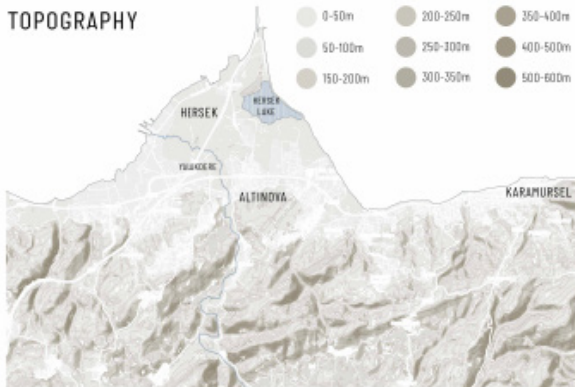
Shipyard structures and natural character in the same silhouette create interesting views



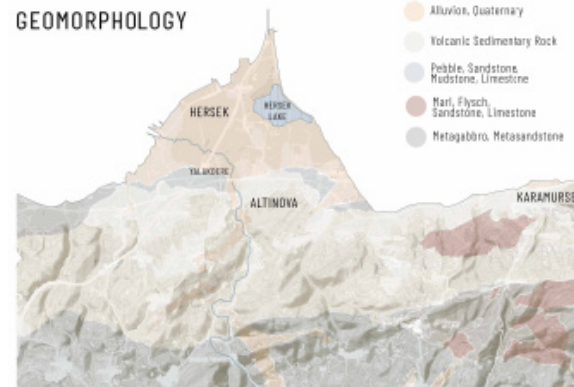
The beach, Osman Gazi Bridge and the factories on the opposite shore can be found in a single frame, another feature that makes the view unique



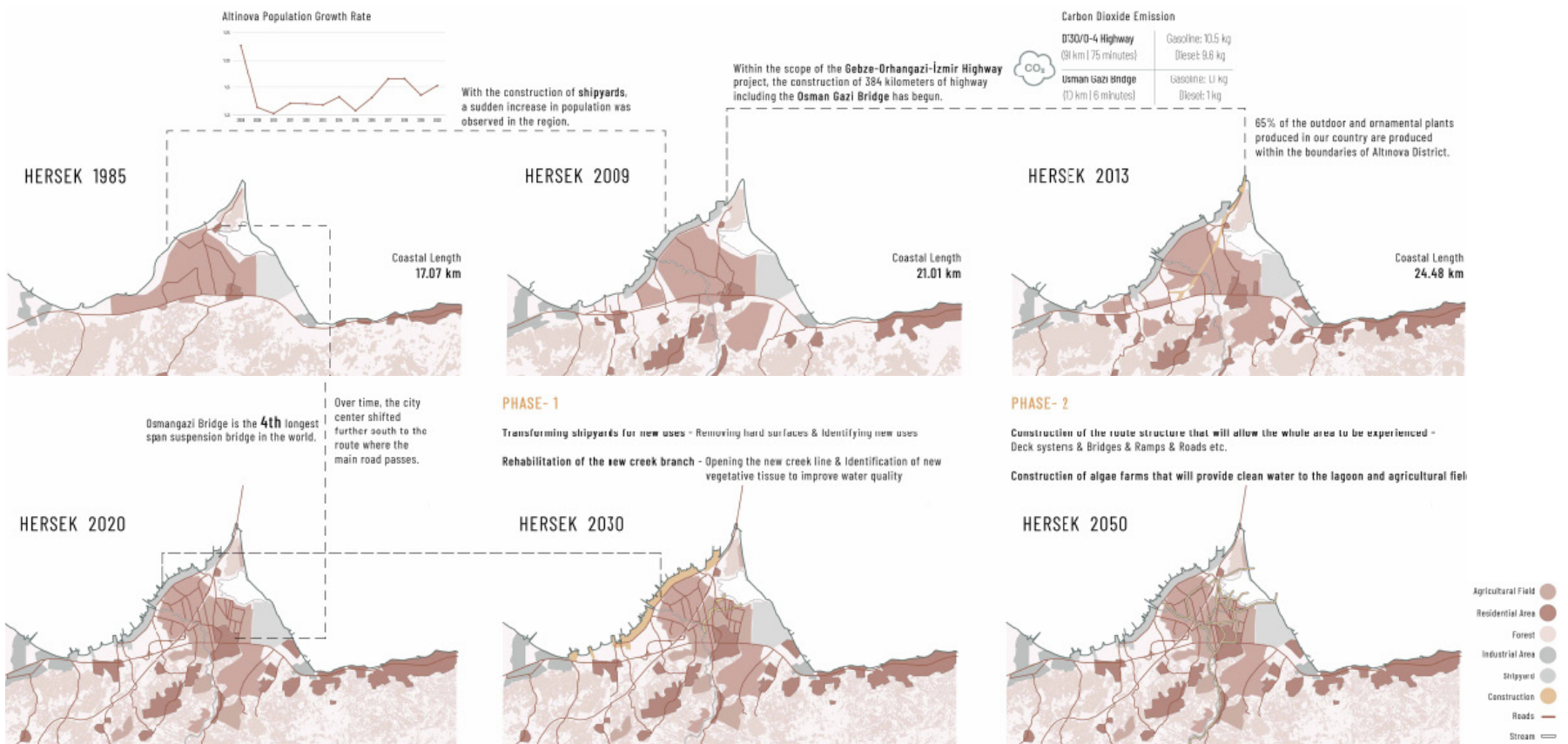
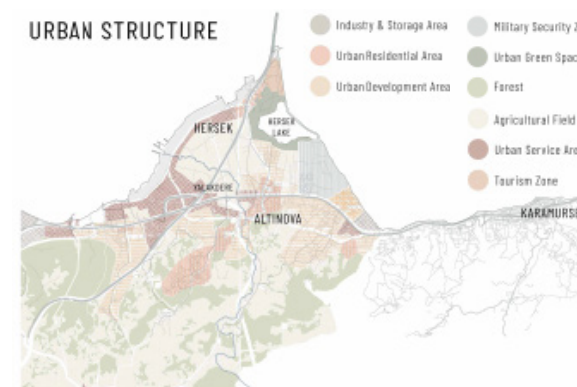
TOPOGRAPHY



GEOMORPHOLOGY



URBAN STRUCTURE



Current Situation Analysis of the Gulf of Izmit

In terms of the scope of the project, the area has been examined on a global scale, under the heading of logistics network, which has a great impact on the character of the area. The cities with the largest ports in the world according to their annual capacities and the place of Kocaeli among these ports have been observed and it has been concluded that Kocaeli has an important place on a global scale.

In order to understand Kocaeli's place in the country-wide logistics network, the locations of logistics centers in Turkey, the national railway network, the provinces with civil aviation customs gates and the provinces with the largest ports have been mapped. Provinces were compared according to their port capacities. It has been concluded that Kocaeli has an important logistics value throughout Turkey.

When evaluated on a regional scale, Kocaeli province, which is located at an important transition point of the Marmara Region; easy access to big cities such as Istanbul, Ankara and Izmir have increased its importance as a port city. The Marmara Sea transportation network, which has many different routes, has made a significant contribution to the development of the city.

When examined at the city scale, it has been observed that the Gulf of Izmit has a sea transportation network in itself, and it has been concluded that the dense transportation network necessary for the continuity of the logistics system of Kocaeli has weakened the coast-city relationship. Although Kocaeli has many coasts to the sea, it has been observed that it has become a city that lives far from the sea.

During the analysis process, the topographic and geomorphological features of the region were examined and its relationship with the existing industrial zones was analyzed. Flora and fauna elements in the region are categorized according to their habitat and altitude.

SUSTAINABLE DEVELOPMENT

HISTORIC / CULTURAL ACCUMULATION

- Ancient Rules
 - A Settlement Dating Back To The Hellenistic Period
- Strategic Location
 - Hosting Roman, Byzantine, Seljuk, Ottoman and Turkish Communities
- Historic Inland Tourism Potential
 - Being on the Silk Road and the Pilgrimage Road
- Cultural Patterns
 - Cultural Heritage Coming with the Migration of People from the Crimea, the Caucasus, the Balkans and Anatolia

NATURAL / GREEN ACCUMULATION

- Association of Lagoon - Tree - Stream - Land Habitats
 - Nature Induced Tourism Potential
 - Nesting Area of Bird Species
 - Maritime Transport + Water Sports
 - Sustainable Green Corridor
 - Herak's Character of Being Delta
- High Species Diversity
 - 48 Plant Families
 - 282 Bird Species
 - 45 Fish Species
- Fertile Land
 - Presence of Agricultural Character

ECONOMIC ACCUMULATION

- Active Coastal Use
 - Supporting the Transportation Systems
- Shipyards Operations
 - Fulfill the Social Space Need
- Tourism Potential
 - Local Community Benefit
 - Sector Open to Technology Driven Development
- Recreational Potential
 - Agricultural Activities

NATURE ACCESS

- Hersek Lagoon
- Harmaro Sea
- Talakdere Stream
- Agricultural Lands
- Bird Population
- Fish Species
- Fish Species

PROGRAM HISTORY

- Walking track
- Cycle route
- Canoe Transportation
- Ferry Transportation
- Disabled Access

Festivals

- Fairs
- Flower Expo
- Marine Expo
- Boat Show
- Congress
- Agriculture Development
- History and Culture Congress

Academies

- Agriculture Academy

Workshops

- Traditional Crafts
- Papermaking

Water Sports

- Canoe and Rowing
- Sports Center
- Sailing Club
- Diving School

Thermal Bath - Fountain

- Kibitoz Loggia Museum
- Dragon Cultural Path
- Hersekzade Ahmed Paşa Mosque
- Halasapits to Hersek Museum
- Revive River-Revive Memories Recreational Hub

Exploration Campus | Hersek , Loop Together , Revive the River – Ecological Recreation Corridor , Microalgae Culture Fields , Shipyard Area



LOOP TOGETHER MASTERPLAN

Kibatos Lagan Museum

Hersek Pier

Port Park & Expo Center

Canoe - Ferry Pier

Logistics Center

Conservation and Sustainable Development Center

Port Park

Sports Hub

Botanical Research Institute

Medicinal Aromatic Garden

Port Park

Canoe - Ferry Pier

Water Sports Center

Dune Ecosystem Development Area

Hersek Hill Forest Walk Route

Helenapolis to Hersek Museum

Bird Watching Tower

Reedway

Lagoon Observation Pier

Lagoon Ecosystem Development Site

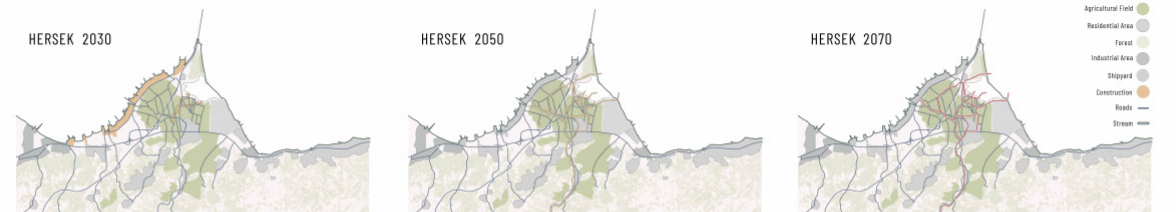
Canoe - Ferry Pier

Microalgae Culture Site

Legend:

- Forest
- Meadow
- Marsh
- Reed
- Wetland
- Ornamental Plants
- Lower River Bank
- Middle River Bank
- Aquatic Plants
- Woodland

VIEWS OF LOOP SYSTEM



Transforming shipyards for new uses - Removing hard surfaces & Identifying new uses

Rehabilitation of the new creek branch - Opening the new creek line & Identification of new vegetative tissue to improve water quality

Construction of the route structure that will allow the whole area to be experienced - Deck systems & Bridges & Ramps & Roads etc.

Construction of algae farms that will provide clean water to the lagoon and agricultural fields

The construction of the Loop System has been completed - It allows the natural existence and historical texture of Hersek to be observed

Microalgae pools actively clean the water that feeds the agricultural areas and the lagoon - With the technologies developed in the Conservation and Sustainable Development Center established in the

RAINWATER HARVESTING

Stormwater Harvesting Tank
200 m³ roof

Storage Water
0.005 m³

PHYTOREMEDIATION TERRACES

DIATOM FLORA OF YALAKBARE

38 square - 88 m² area
area identified

Diatom Flora

Microalgae Production Station

MICROALGAE CULTURE OPEN POND SYSTEM

Sunlight

CO₂

Inorganic Nutrients
Organic Matter

Microalgae Culture

Harvest

Wastewater (Domestic, Agricultural)

Treated Water

