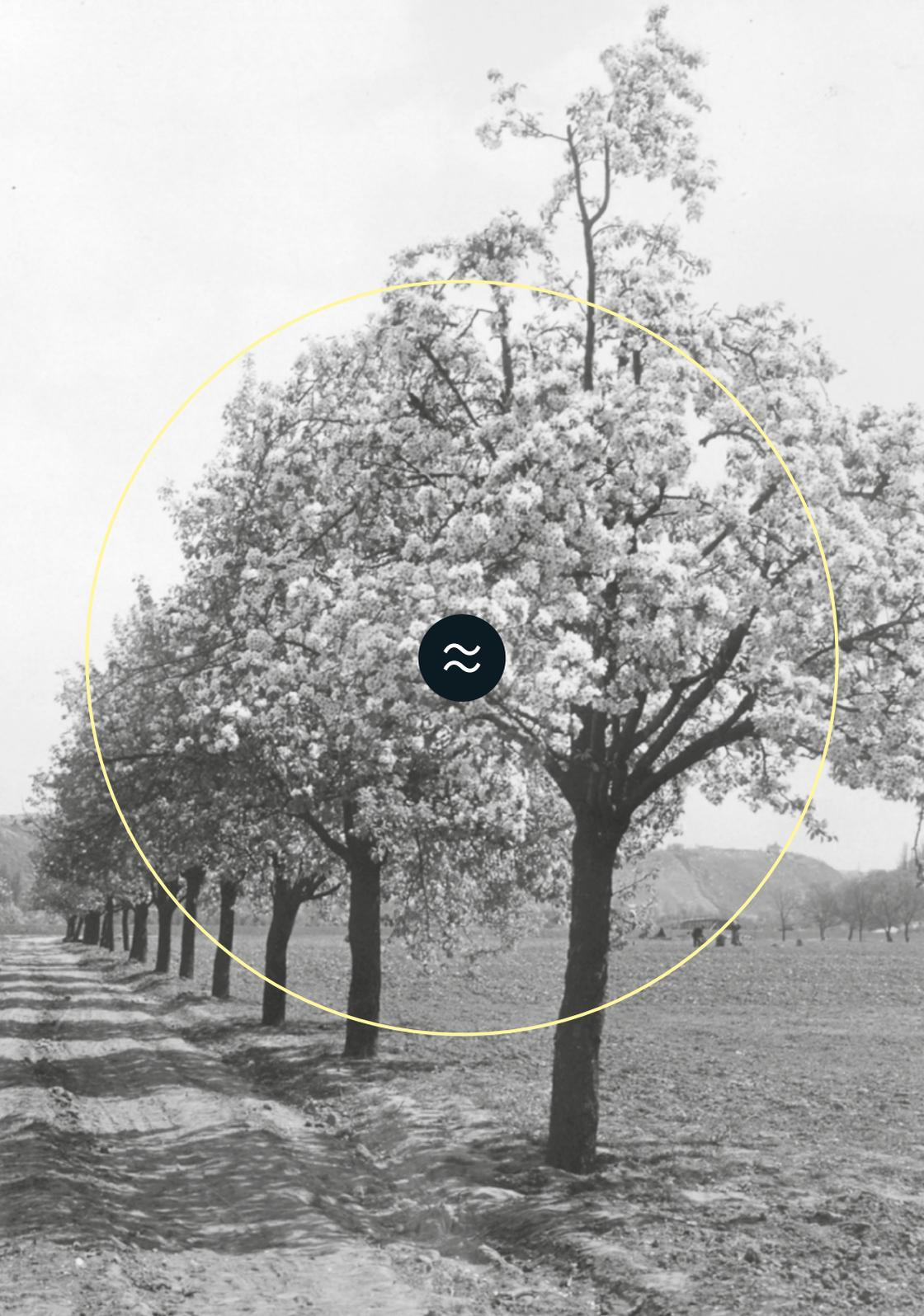




**With
the River
Together**





With the river together

**the river enchants us,
if we are able to feel its magic
the river warns us, if we try to bind it
the river gives, if we respect it**



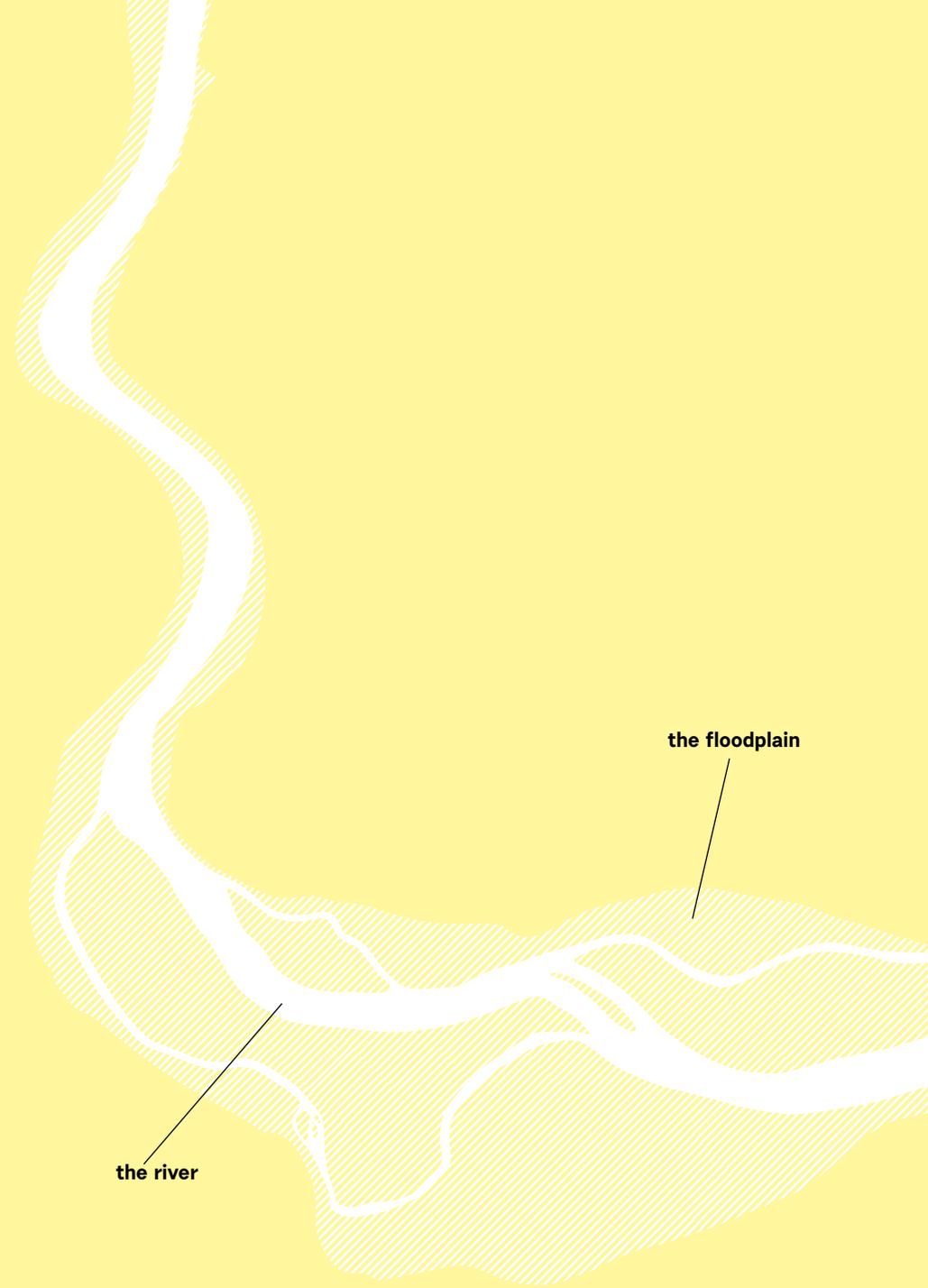
IPR ———
PRaHa



The book you have just opened relates something of the parallel lives of man and the river in the Troja Basin. It is part of an exhibition stemming from the belief that this shared history is a valuable information source. We are just as dependent on the river as we ever were, only this is easily forgotten today and so we make mistakes. We do not realise that even seemingly unrelated human activity can seriously disrupt our relationship with the river. The signs of our cohabitation are clearly written into the countryside and we will be happy if the exhibition motivates you to take a closer look at them.



**The river
channel, its
islands and its
distributaries
have been
changing
throughout
the centuries.**

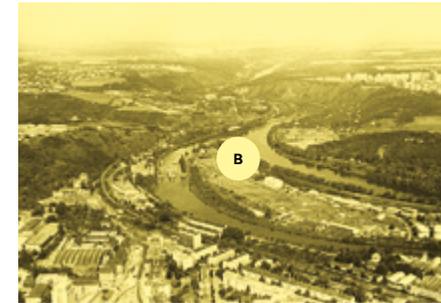
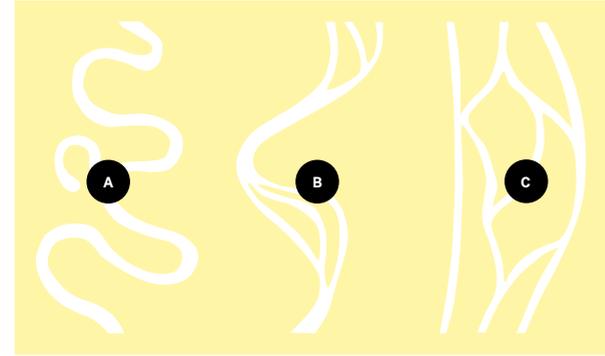




⬆️ The land next to the river and the watercourse have historically constituted a single, uninterrupted space: the floodplain—a flat area created by ancient deposits, covered with meadows, riparian woodland and lakes, inundated by the annual floodwaters.

The Troja Basin is an area created through a thousand years of action by the Vltava River, alternately winding and branching out into new distributaries.

1



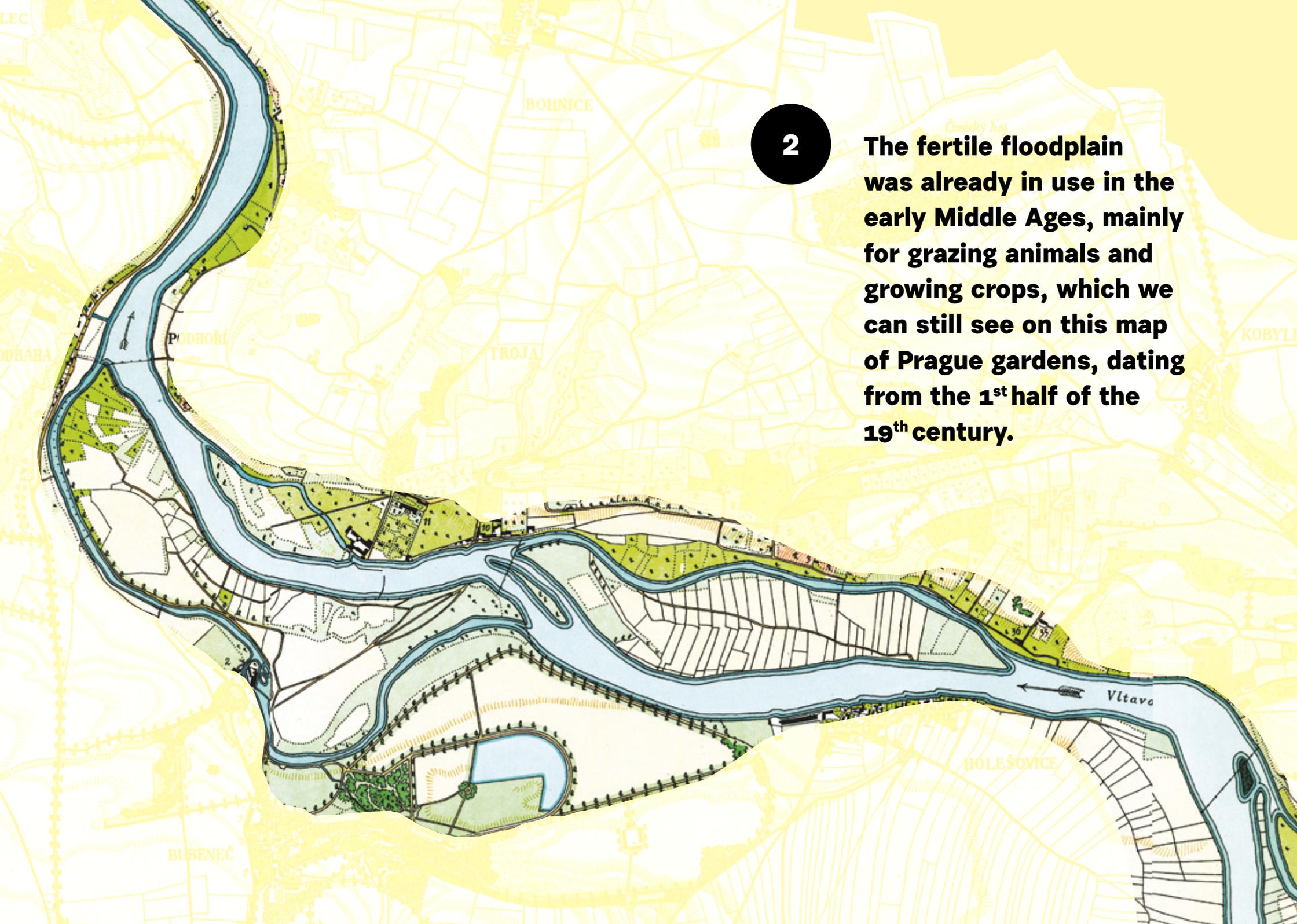
⬅️ A river essentially behaves in three ways: it meanders, **A** branches **C** or deepens. This depends on whether it flows from mountains or through lowlands, how hard the ground is along its path, and how often and how much it rains during the year. The river channel shape can also reflect the effects of more than one process. **B**



➤

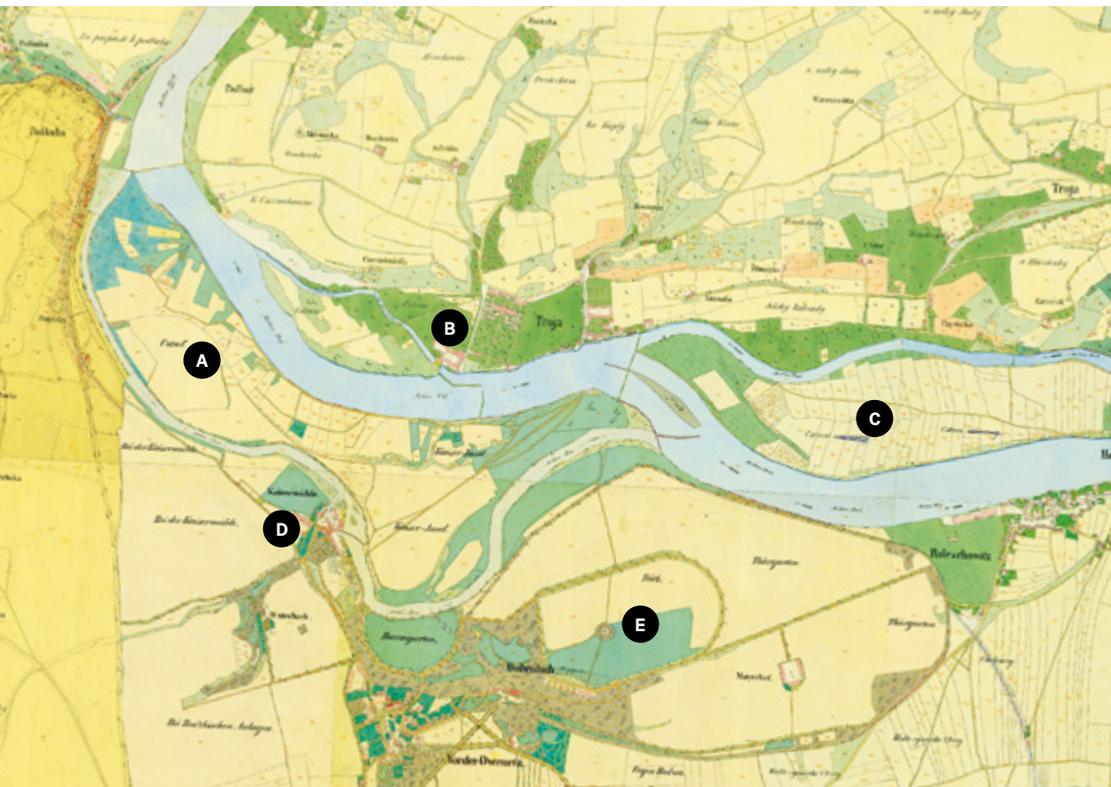
In the upper left part of this map of Prague from around 1780, we can see how many distributaries the river created around the Troja Basin. The naturally meandering river found new courses in times of flood.





2

The fertile floodplain was already in use in the early Middle Ages, mainly for grazing animals and growing crops, which we can still see on this map of Prague gardens, dating from the 1st half of the 19th century.



Maps from the mid-18th to mid-19th centuries show how the river channel was transformed in that period. The natural appearance and disappearance of gravel islets during floods has always been accompanied by human intervention — constructing weirs and flumes, stabilising banks and islands. There was a mill on each river bank: the one on the right was called Troja,^B while that on the left was Imperial Mill^D. The adjacent Royal Game Preserve^E helped retain the character of the landscape of floodplain meadows and woodland. To facilitate navigation on the river, the distributary dividing Holešovice Island^C was filled in at the turn of the 19th and 20th centuries, and of the islands, today only Imperial Island^A remains.

4

The Troja Basin served primarily as a place of relaxation and diversion in natural surroundings for the Bohemian rulers. The governor's summer palace has been a feature of the Royal Game Preserve since the 15th century, while Rudolf II had Imperial Mill converted into a palatial summer residence.



5

Man has always used the river for his needs. It provided livelihoods for fishermen, it powered water mills, picturesque spots were popular with visitors, while the nobility and poachers hunted game in the floodplain woodland.



The only buildings that traditionally lay right on the floodplain were the water mills (Troja Mill can be seen here). It was only in modern times that the houses of poor fishermen—which had to be modified to cope with the regular floods—were pushed onto the plains.



Both mills stood at the level of the lower edge of the Troja rapids, where the river's current—strengthened with weirs—had the greatest momentum. A gem-polishing factory established in part of Imperial Mill under Rudolf II also took advantage of the river, followed by a textile factory and a paper mill in the 19th century.



The floodplain woodland on the left bank had been protected since the Middle Ages as a hunting ground for Bohemian rulers. Under Rudolf II, some parts of it were converted into gardens. The early 19th century saw the start of the transformation of the preserve into a modern, romantic park, today's Stromovka, which has only sporadically preserved its original character.



Troja Chateau was built at the end of the 17th century as a suburban villa for Václav Vojtěch of Sternberg. The architect, Jean Baptiste Mathey, wisely placed the building at the edge of the floodplain, with only the chateau garden encroaching on it.

6

In the 19th century, the picturesque Troja and the Stromovka became very popular destinations for trips, yet the lives of the locals continued to be tied to the slow rhythms of the river.

Until the construction of the footbridge in 1976, the ferry to Imperial Island was the key means of transport connecting Troja with the city. At low water, small boats were linked together to form a pontoon bridge. Carriages and, later, cars were brought over by a large barge.



The river was also used to transport loads on horse-drawn boats. Embankments were used to assist this traffic, and we can still see their remains on the banks of the Vltava today.

The Troja hillsides were planted with vineyards and primarily orchards, which reached down almost to the floodplain. The Podhoří area, for example, was renowned for its cherries.



The Jubilee Provincial Exhibition in 1891 bit off around a fifth of Stromovka. Industrial Palace, one of the few permanent structures, was built on the edge of the boundary fault bordering the floodplain—as seen in this view from behind with Křížík's Fountain in the foreground.

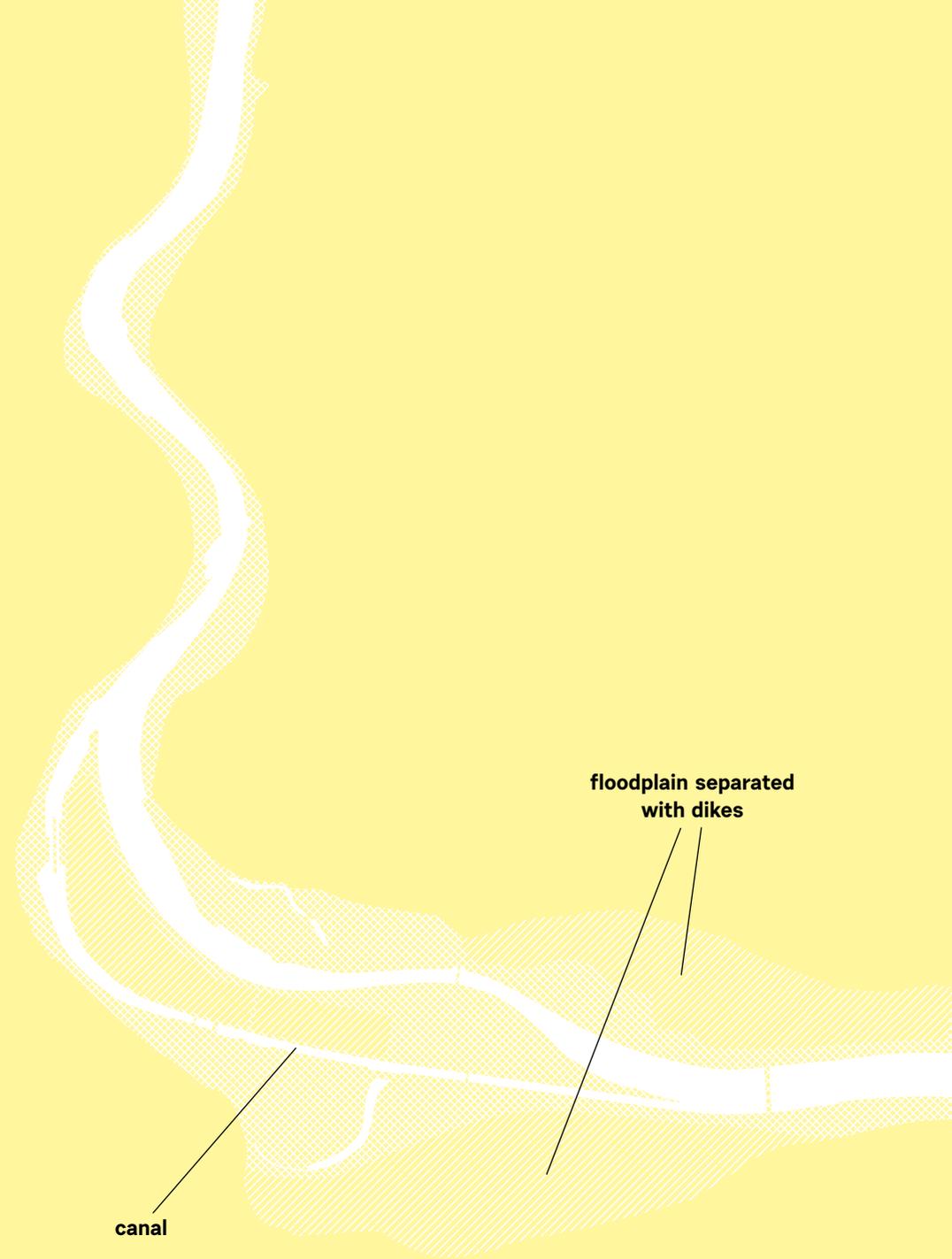


The tourist restaurants at Troja and Podhoří were popular destinations for weekend walks. Day-trippers relaxed at the U Loskotů restaurant and ate grundel caught in the Vltava, but local organisations also met here.

Dikes, used to regulate the river's flow for better navigability, were also used for bathing and fishing.



**This mutual
coexistence
with the river
was replaced
with unilateral
exploitation
in the 19th
century.**



7

At the end of the 19th century, it was decided to make the Vltava and Elbe navigable from Prague to Ústí nad Labem. The modifications enabled more intensive river traffic and easier urbanisation of the floodplains, yet at the same time disrupted the original regime of the river landscape. The river had begun to be seen as a canal.

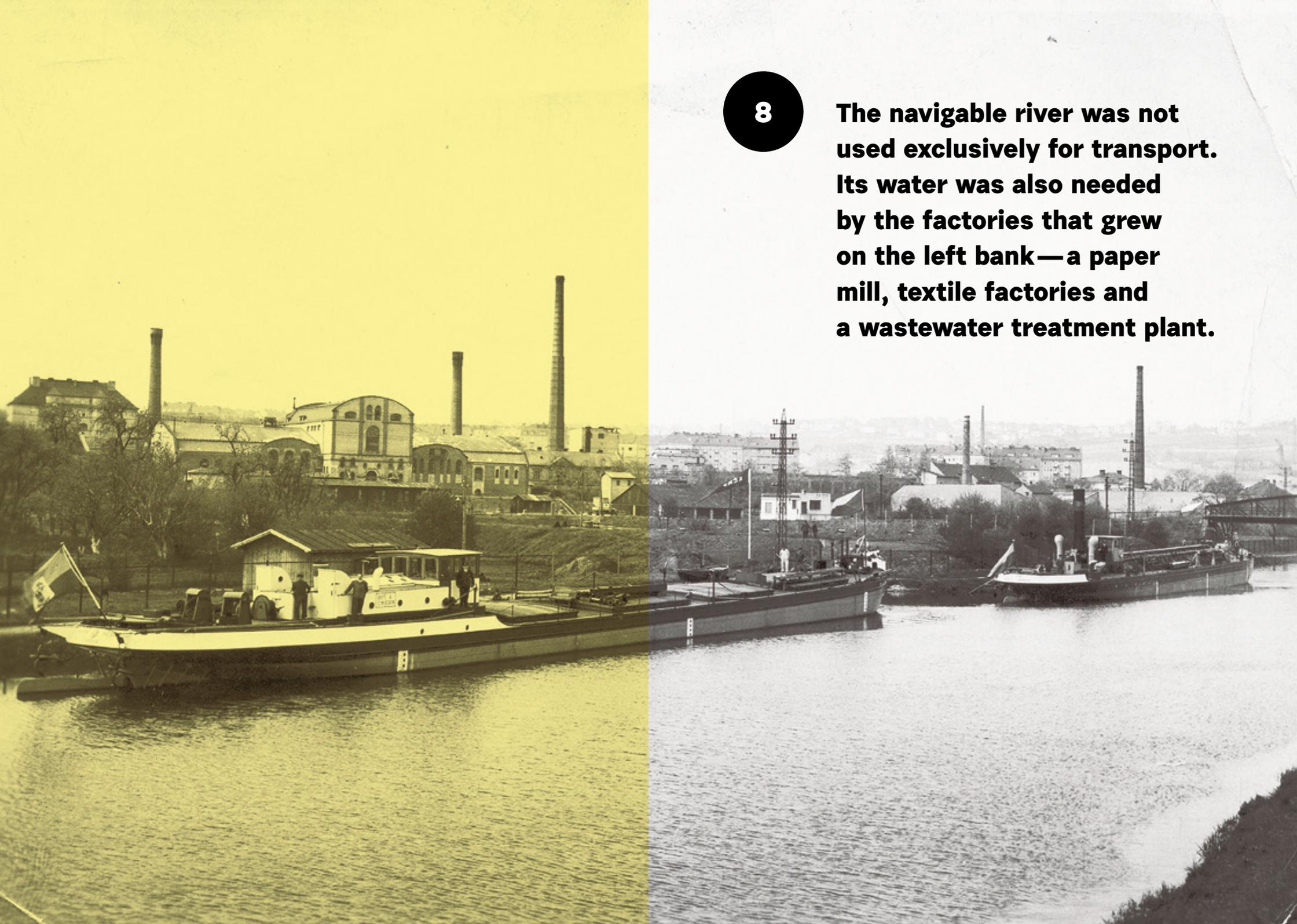
When making the Vltava navigable at the turn of the 19th and 20th centuries, the Troja-Podbaba lock was established, including a three-kilometre canal that cut a new route through Imperial Island. This changed its outline and cut off the former Royal Game Preserve, today's Stromovka, from it.

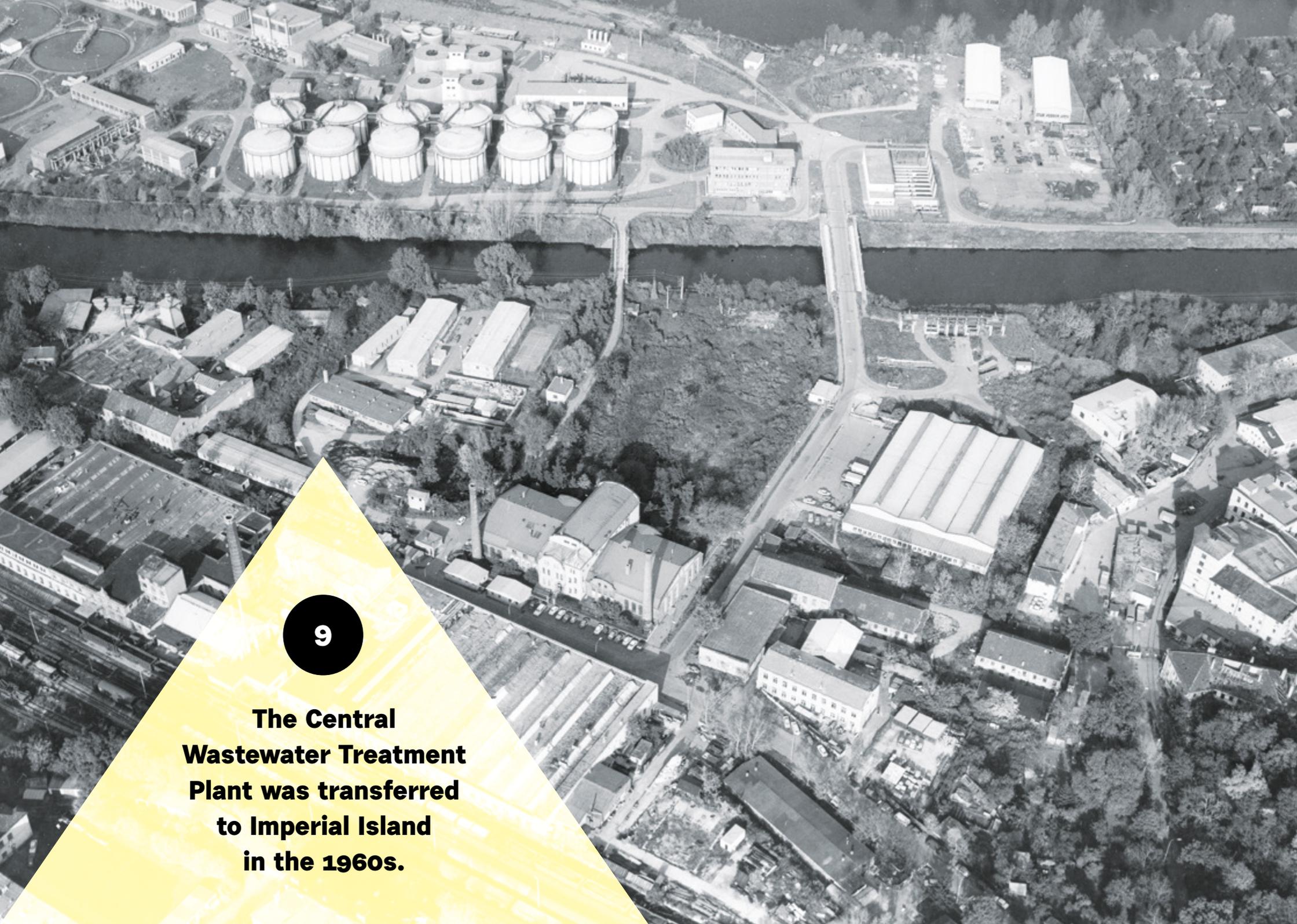
In the 1840s, the railways were the first to cut through the original floodplain and thus launch the era of the modern exploitation of the Troja valley, one that took hardly any heed of the nature of the river and its stories. On the map on the left from between 1836 and 1852, you can still see the meandering distributary along which the Saxon-Bohemian State Railway ran. The distributary was closed off some time later during the construction of the canal (the map on the right), with only a park lake on the edge of Stromovka, known as the Little Stream, remaining.



8

The navigable river was not used exclusively for transport. Its water was also needed by the factories that grew on the left bank—a paper mill, textile factories and a wastewater treatment plant.

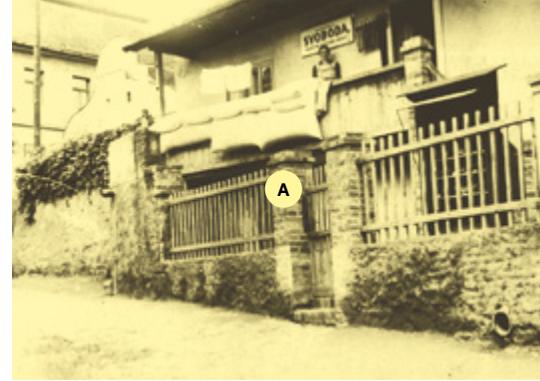




9

**The Central
Wastewater Treatment
Plant was transferred
to Imperial Island
in the 1960s.**

High water had always been part of life in the Troja Basin. The old local houses had been modified accordingly, with workshops or stores on the ground floor and people living upstairs with courtyard balconies.^A People often spent several days surrounded by water, for example the Troja Mill residents in March 1940.^B The technical modifications to water flow in the Vltava river basin have contributed towards faster water runoff from the land, which in turn can lead to destructive floods. During the flooding in 2002, the whole of Imperial Island disappeared under the water,^C while the Troja Chateau gardens were also flooded.^D Although dams now protect property, each new one reduces the space for water to flow at high water.^E



11

The areas around the Troja footbridge have also undergone modern flood-control modifications, as we can see in the panorama images taken from the same place almost one hundred years apart.



This photograph from 1924 shows the Rybáře fishing community (on the left) and Imperial Island (usually called Troja Island by the locals). Here we can see the unloading point for the ferry and the booth for the ferryman, who at weekends transported crowds of Prague citizens flowing from Stromovka across the island and on towards Troja. Several garden restaurants with views of the river and the vineyards also attracted day-trippers on the island.



In place of the popular ferry, a reinforced concrete footbridge—a replacement for the temporary pontoon bridge—today connects the island to the Troja bank. A large riding school and stables now stand on the island. The houses of the earlier fishing community on the bank are protected not only as cultural monuments but also from flooding—there is a four-metre-high flood wall between them and the river.



12

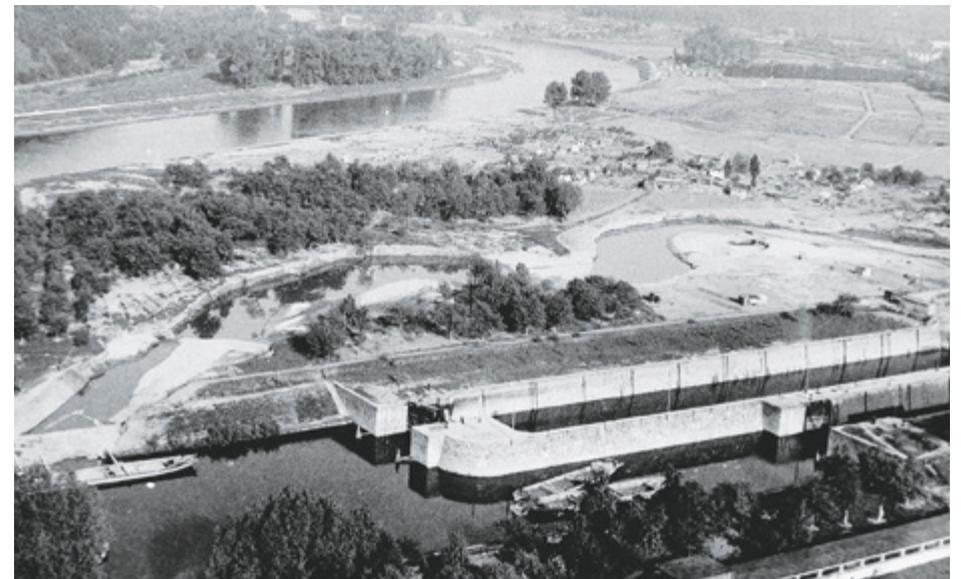
During a flood, rivers often return to places that dikes and other structures pushed them away from, and spread out over their former floodplains. The countryside has a better memory than the people that use it.



In June 2013, the swollen river forced a way through Imperial Island. After the flooding, this newly established river channel was again filled up with stones, but the river's message was not forgotten.

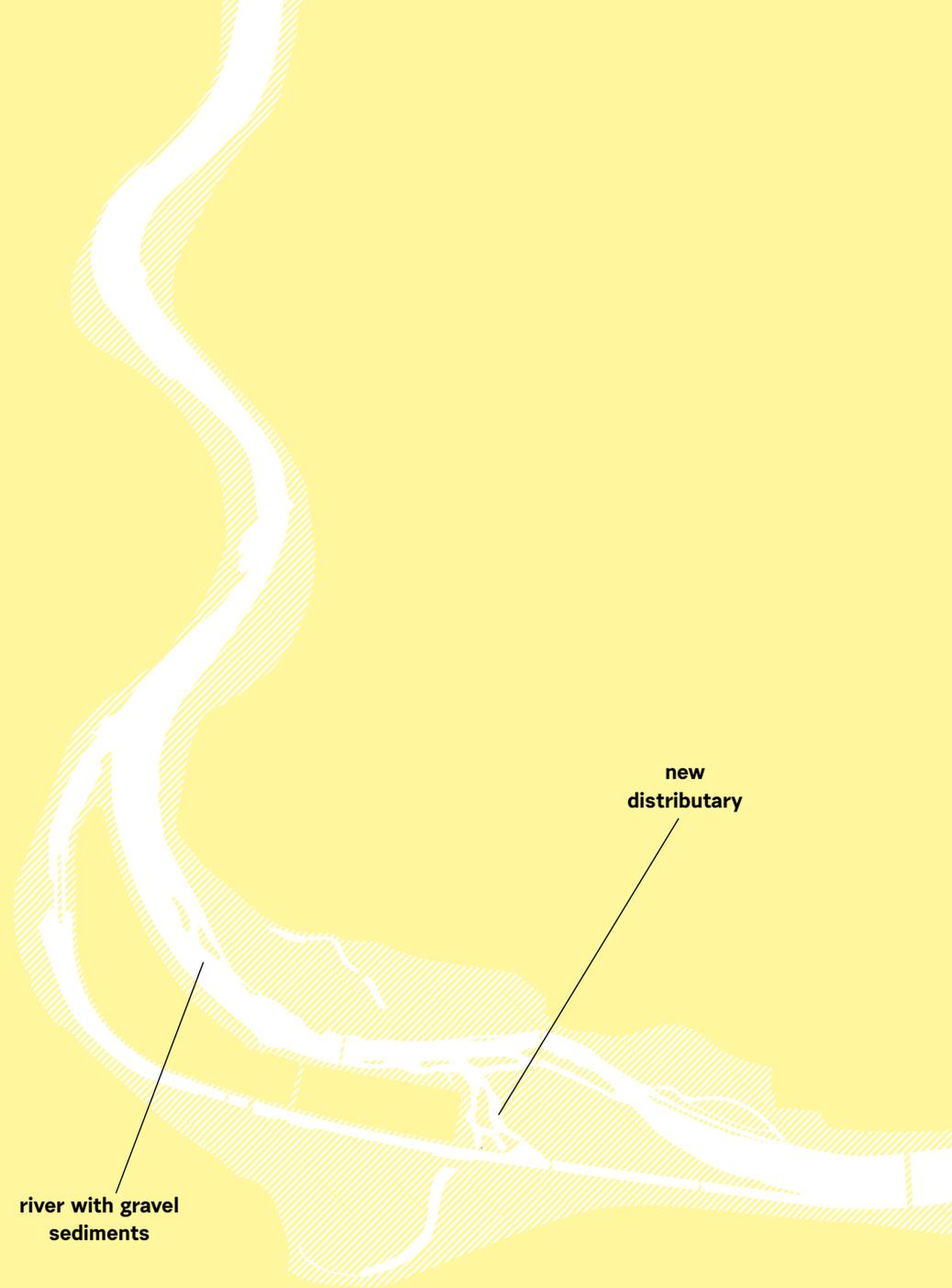


View of Imperial Island (still without the wastewater treatment plant) and the lock at Podbaba, 1920.



This photograph taken from the same place shows the state after the flooding in 1940, when the river broke through the canal and found its own way through the island.

**We are now
relearning how
to design in
harmony with
nature and
take account
of river level
changes.**



The alluvial river landscape is again being considered in connection with a project to expand the wastewater treatment plant. The first step towards the new Imperial Island Conception was a competition workshop, intended to produce proposals to improve the New Water Line project,¹⁴ recommendations on how to address its surroundings,¹⁵ and a proposal for the revitalisation of the natural river environment around the structure.¹⁶

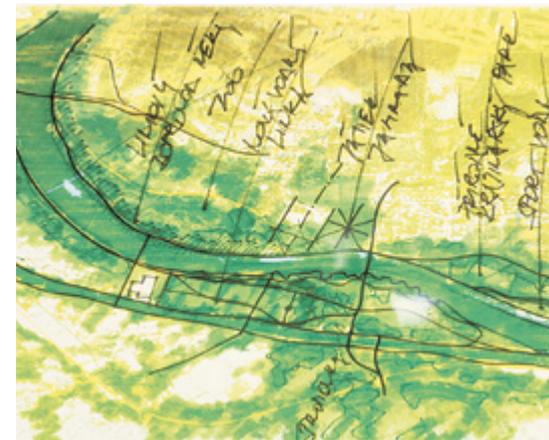


The New Water Line (NWL) project, expanding the existing wastewater treatment plant, offers many technological and operational advantages, yet lies in a very sensitive location. Mitigation of its impact on the landscape must be addressed in the context of the wider area. In 2015, therefore, the Prague leadership issued a request for the preparation of a Conception of the General Landscape Solution of Imperial Island and its Surroundings.



The competition workshop enabled the participation of all the important players with differing interests and priorities.

The city districts want to retain an attractive landscape; environmentalists want respect for natural values; Vltava authority wants flow capacity; the zoo wants transport accessibility; the investor, manager and supplier of the new treatment plant want as little interference in the project as possible...

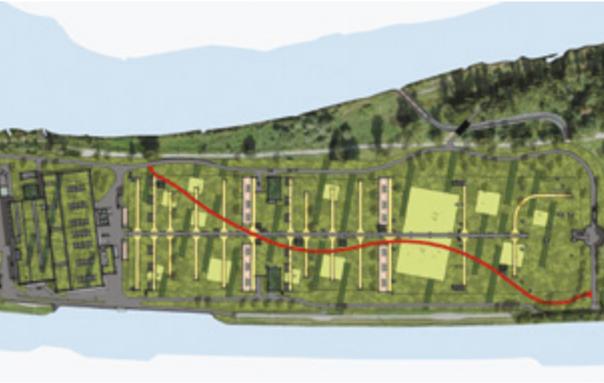


At the workshop, five teams made up of architects, landscape architects, transport and water management engineers, worked together with local stakeholders. There were conferences, excursions, a colloquium with discussion panels, and ultimately a presentation of the proposals.



A jury declared the proposal by P. Peřák, V. Malina, E. Wagnerová and M. Šindlar to be the winner. The team then completed the Imperial Island Conception, while preparation of an action plan will follow.

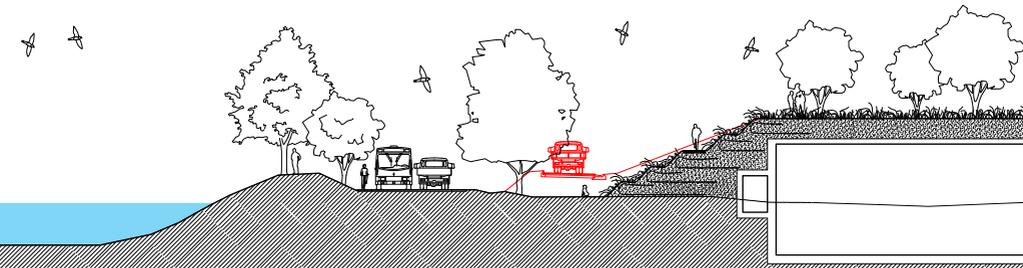




The existing NWL project anticipates covering the treatment plant with a new city park. Earthworks along the sides of the structure will connect the roof to the surrounding terrain, but will restrict the use of the riverbanks.



The new Conception proposes a roof of local steppe vegetation, freeing up the banks, and reducing the original backfills to provide sufficient space between the structure and the river for a natural landscape belt with a network of walking, cycling and equestrian trails.



The southern part of the island is modified in the Conception to enable buses to drive right up to the new footbridge taking people to the right bank and the zoo. However, the NWL project has been running since 2004, and the Conception appeared just before construction work began. It is still unclear whether the modifications can actually be done during the construction work, or only after it is completed.

14

The proposed modifications to the New Water Line project emphasise the relationship with the river and respect the floodplain terrain, thus preserving the memory of the location and connecting with the vitality of the river ecosystem.



The new Conception rejects the idea of a city park on the roof of the New Water Line in favour of access to the river. The use of the floodplain ecosystem will provide not only an inspirational natural environment, but is also cheap to maintain.

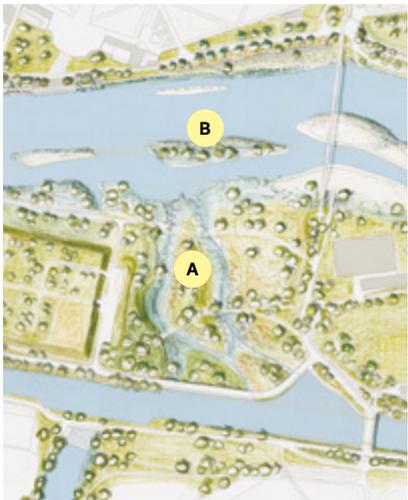
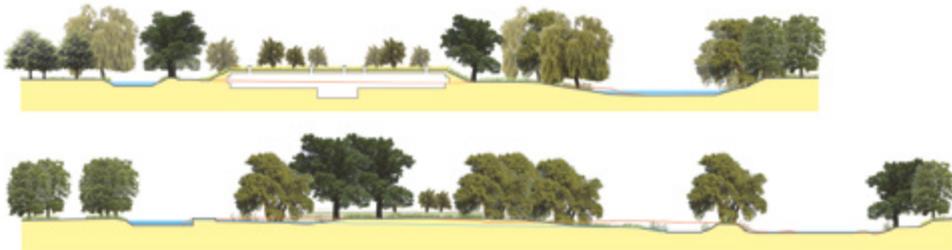
Conception addresses the wider environment, defines a framework of public spaces and landscape, together with the accessibility and throughflow of the area.*

15

- train
- bus
- eco-mini-train
- tram
- proposed tram
- walking trail
- cycling trail
- + walking trail
- horse-riding trail
- ferry and water tram



The revitalisation of the area will include a shallow furrow across the island and an expansion of the northern distributary. This will provide more space not only for high water flow, but also habitats at the transition between the river and its banks.



The cross-sections show the alluvial landscape after the revitalisation of the Vltava river channel with small islands in the widened channel, riverbank vegetation and an embedded new wastewater treatment plant.



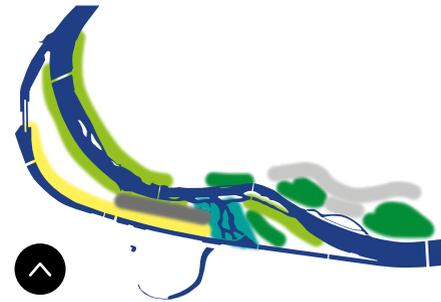
The meandering creeks and river islands in the shallow part of the river will create a unique natural space for play and recreation for both children and adults.



The Conception has returned to the character of the floodplain. The main channel is expanded and features modelled islands that the river will often flood. A shallow water furrow will lead across the island.



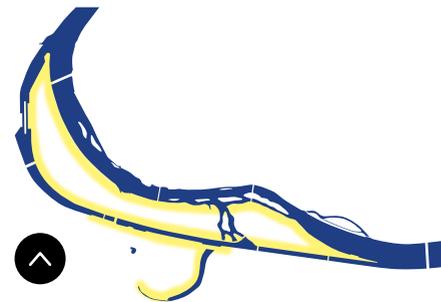
This diagram shows valuable trees on the island (black polar, oak, linden), which will be retained, as well as the remnants of the original vegetation along the former branch of the river and paths.



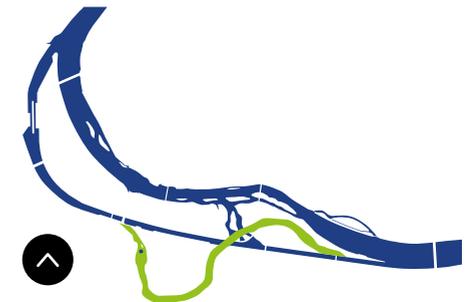
The Conception will support the diversity of plant and animal species, which will be allocated their own sites.



Lowering the banks will enable the gradual creation of a mosaic of near-natural plant communities.



There is a plan to open up currently difficult-to-access banks for walking, cycling and horse riding.



The route of the original distributary will be symbolically marked with oaks and poplars along the former river bank.

An aerial photograph of a wide river with several gravel islands. The water is a dark, slightly rippled blue-grey. The islands are composed of light-colored gravel and are partially covered with young, green trees. The surrounding banks are lush with green grass and mature trees. In the bottom left corner, a paved path runs along the riverbank, and a person is seen riding a bicycle. A large yellow callout box is overlaid on the right side of the image, containing text and a page number.

The branching channel among gravel islands that will be covered with vegetation is already being created. Designing with nature means understanding its signs and allowing them to manifest themselves.

17

Man's use of the river in the Troja Basin has a long history. It has not always been in conflict with the natural characteristics of the river landscape, and need not be so today. We must however place the river in the centre of our attention and care for it holistically.

As an immediate, living landscape it can then offer us its gifts. We believe that such care is possible—and good examples already exist. With this exhibition we want to contribute to the mosaic of activities leading to changing our approach to the river and its needs.



We would like to thank all those who participated in preparing or supporting the exhibition, and thus making it possible:

Prague City Councillor RNDr. Jana Plamínková, Prague-Troja city district, Prague 7 city district, Prague 6 city district, Povodí Vltavy, University Sports Club Prague—Water Slalom Section, Department of Property Management at Prague City Hall.

We would like to thank the following for providing archive materials:

Prague City Hall Archive, Prague Zoo Archive, Gábina Fárová, Miroslav Knittl, Karel Mach, František Malý, Judita Matyášová, Magdalena Wagnerová, City of Prague Museum, T. G. M. Museum in Lány, Quido Schwanka Foundation, National Heritage Institute, Museum of Czech Literature, Miroslav Raudenský, Továrna, o. p. s. — správa industriálních nemovitostí

	Sails among the trees		Large book
Introduction	Troja Chateau, cca 1740 ~ Prague City Archive, sig. G 85 Potamogeton fluitans ~ plantillustrations.org	Introductory double page	At Imperial Island, photo Č. Jirů, 1970 ~ City of Prague Museum, sig. H 203 823 Rudolf Keller: View from the Chapel, 1847 ~ Quido Schwank Foundation
The river enchants us	Woodcut of a river landscape ~ archive.org	Chapter 1	Prague aerial documentation collection 1988, photo K. Wartha ~ IPR Praha Zdenka Braunerová: Bend in the River (Three Kings) ~ Wikimedia Commons
The flowing stream	Prague Gardens, Parks and Orchards 1790—1830, E. Hnilička and Z. Wirth, section ~ IPR Praha Grid with Trout ~ archive.org Common Comfrey ~ scanzen.cz Dragonfly ~ archive.org	Chapter 2	Map of Prague, J. Ch. Winkler cca 1780 ~ Prague City Archive, sig. MAP P1 B25
Sheep in Ovenec	Sheep Engraving ~ Wellcome Library, London Potamogeton fluitans ~ plantillustrations.org A. Levý: Troja in Prague, repro from Golden Prague III/2, 1886 ~ City of Prague Museum	Chapter 3	Prague Gardens, Parks and Orchards 1790—1830, E. Hnilička and Z. Wirth, section ~ IPR Praha Map documenting the siege of Prague by the Prussians, pplk. Rebarý 1757, section ~ National Heritage Institute General Directorate (NHI GD), inv. No PPOP-996-5-550 Map of Prague and the Northeast, C. Schütz 1782, section ~ NHI GD, inv. No PPOP-994-5-4378 Map of the area northwest of Prague, J. Uffer 1801, section ~ NHI GD, inv. No PPOP-996-5-745 Map of the area before Charles Gate, J. Figar 1825, section ~ NHI GD, inv. No PPOP-996-5-971 Imperial Imprints of the Stable Cadastre Maps 1840, Ústřední archiv zeměměřičtví and katastru ~ IPR Praha
The discovery of Troy	A. Tidemand & H. Gude: Bridal Procession ~ Googleart Project Troja 1871—73, from the autobiography of Heinrich Schliemann ~ zeno.org	Chapter 4	Royal Game Preserve with governor's summer palace ~ Prague City Archive, sig. I 42/32
The sorcerers' lights	Portrait of Josef Sudek, photo J. Prokeš ~ provided by M. Wagnerová Troja Island, photo J. Sudek ~ provided by G. Fárová	Chapter 5	Imperial Mill on a map of the land NW of Prague, J. Uffer 1801 ~ National Heritage Institute, sig. PPOP-996-5-745 F. Štěpánek: Old Troja Mill, 1936 ~ Quido Schwank Foundation
A remarkable magician	Portrait of Vítězslav Nezval ~ Museum of Czech Literature Bedřich Feuerstein ~ Museum of Architecture and Civil Engineering at the National Technical Museum		F. Lepié: Imperial Mill in Bubeneč, 1857 ~ City of Prague Museum, sig. H 28 183 R. Kubik — mechanised paper mill at Imperial Mill, 1898 ~ koda.kominari.cz Æ. Sadeler: Forest Landscape ~ Wikimedia Commons
The President's ferryman	T. G. Masaryk at Bystřička ~ T. G. M. Museum in Lány T. G. Masaryk on Horseback ~ czumalo.wordpress.com Ferry at Troja ~ Quido Schwank Foundation, provided by M. Knittl		Troja Chateau, cca 1793 ~ Prague City Archive, sig. G 211 View of the ferry at Troja, photo F. Fink 1915 ~ Prague City Archive, sig. I 4313 A. Levý: Troja in Prague, repro from Golden Prague III/2, 1886 ~ City of Prague Museum View of Prague from Troja, photo M. Chalupníček 1965 ~ Prague City Archive, sig. VII 458 Křížlík's Fountain and Industrial Palace, 1895 ~ Prague City Archive, sig. XII 1813 Tourist Restaurant of Pavel Loskot ~ Quido Schwank Foundation, provided by F. Malý Dikes on the Troja riverbank, photo No 19, A. Alexander 1924 ~ IPR Praha
Kafka the athlete	Institute of Pomology ~ Quido Schwank Foundation, provided by F. Malý Max Brod and Franz Kafka ~ repro from a book by Klaus Wagenbach "Franz Kafka: Bilder aus seinem Leben", provided by J. Matyášová Institute of Pomology ~ Quido Schwank Foundation, provided by F. Malý	Chapter 6	Detail from the 2nd military mapping of Bohemia, 1836—52 © 2 nd Military Survey, Section No. 8 II, Austrian State Archive/Military Archive, Vienna © Laborař geoinformatiky, Univerzita J. E. Purkyně © Ministerstvo životního prostředí ČR ~ oldmaps.geolab.cz Detail from the 3rd military mapping of Bohemia, 1877—80 © Laborař geoinformatiky, Univerzita J. E. Purkyně © Ministerstvo životního prostředí ČR ~ oldmaps.geolab.cz Prague aerial documentation collection 1988, photo K. Wartha ~ IPR Praha View of Dejvice from above, photo J. Fleissig 1962 ~ Prague City Archive, sig. VI 61/19
A Troja toast	Troja Chateau, cca 1740 ~ Prague City Archive, sig. G 85 Postcard from Troja, 1919 ~ Quido Schwank Foundation		Dock with sludge boat ~ Továrna, o. p. s. — správa industriálních nemovitostí Prague aerial documentation collection 1988, photo K. Wartha ~ IPR Praha The House u Svobodů ~ Quido Schwank Foundation, provided by F. Malý Aerial view of Imperial Island, 2002 ~ Miroslav Raudenský Troja Mill during the floods of 1940, photo. V. J. Staněk ~ Archiv Zoo Praha View of flooded Troja Chateau, 2002 ~ Prague City Archive, sig. XXII 4/28 The floods of 2013, photo J. Papež ~ Archiv Povodí Vltavy Panoramic view of Imperial Island, photo No 18, A. Alexander 1924 ~ IPR Praha Panoramic view of Imperial Island, photo J. Malý 2016 ~ IPR Praha
The vanished floodplain	Rudolf Keller: View from the Chapel, 1847 ~ Quido Schwank Foundation Prague aerial documentation collection 1988, photo K. Wartha ~ IPR Praha	Chapter 7	The rupture of Imperial island 2013 ~ IPR Praha View of Imperial Island, photo F. Fink 1920 ~ Prague City Archive, sig. I 8 The floods of 1940, photo Z. Kropáček ~ Prague City Archive, sig. I 1982 Workshop 2015— colloquium, photo J. Malý ~ IPR Praha Aerial view of Imperial Island, 2009 ~ IPR Praha Workshop 2015— sketch by Ing. Zdeněk Sandler, photo J. Malý ~ IPR Praha Workshop 2015— assessment, photo J. Malý ~ IPR Praha Workshop 2015 — visual of the Prague MWL WWTP project, Sweco Hydroprojekt, photo J. Malý ~ IPR Praha Cross-section, Detail of the Overall Situation and Visualisation from the Proposal for Modifications to the NWL Landscape Project, Conception of the General Landscape Solution of Cisařský Island and its Surroundings (the Conception) 2016, P. Peičák, V. Malina, E. Wagnerová, M. Šindlar ~ IPR Praha
The river warns is	Slapy Dam ~ private archive Slapy Dam Construction ~ Wikimedia Commons	Chapter 8	Overall Situation from the Conception ~ IPR Praha
The Troja miracle	Picture of Mary Magdalene after the flood, photo K. Mach ~ Quido Schwank Foundation	Chapter 9	Cross-sections, Diagrams and Situation from the Conception ~ IPR Praha
The river gives	Valerian ~ biolib.de Prague aerial documentation collection 1988, photo K. Wartha ~ IPR Praha Dragonfly ~ archive.org European Chub ~ archive.org Ground Elder ~ biolib.de	Chapter 10	Gravel Sediments in the Northern Branch, photo J. Malý 2015 ~ IPR Praha Ferry in Troja, photo E. Hnilička 1959 ~ Muzeum hl. m. Prahy, sig. H 221 587
The right to the landscape	Edible Snail ~ archive.org Boys by the River ~ private archive Dog on the Riverbank ~ Wikimedia Commons Tourist Restaurant of Pavel Loskot ~ Quido Schwank Foundation, provided by F. Malý Dáda and Emik ~ private archive Summer on the River ~ rebloggy.com	Chapter 11	
Purely between us	František Štěpánek: Old Troja Mill, 1936 ~ Quido Schwank Foundation Potamogeton fluitans ~ plantillustrations.org Geese, photo Wing-Chi Poon ~ Wikimedia Commons Cat Drinking from a Tap, photo Tomasz Sienicki ~ Wikimedia Commons Isar, photo Bernd Reuschenberg ~ Wikimedia Commons European Chub ~ archive.org	Chapter 12	
Let's give ourselves a gift	Flowerbed ~ private archive Ground Elder ~ biolib.de Water Texture No 10 ~ textures.com	Chapter 13	
		Chapter 14	
		Chapter 15	
		Chapter 16	
		Chapter 17	
		Conclusion	

With the River Together
Past, Present and Future of the Troja Basin

**Catalogue of the exhibition for Conception of the General Landscape Solution
of Císařský Island and its Surroundings**

Head of the conception: Pavla Melková, Štěpán Špoula

**Exhibition author team: Štěpán Špoula, Marek Kundera, Marek Kopeček, Michelle Šiml,
Kristýna Bartoš, Jana Jebavá, Eliška Kosová, Anežka Součková, Adam Vízek,
Václav Odvárka**

Project implementor: Adam Švejda

Graphic design: MAKE*detail

Realization: Adam Vízek, Václav Odvárka, Tomáš Veith, Marie Gelová

Translation: PRESTO Translation centre, Prague

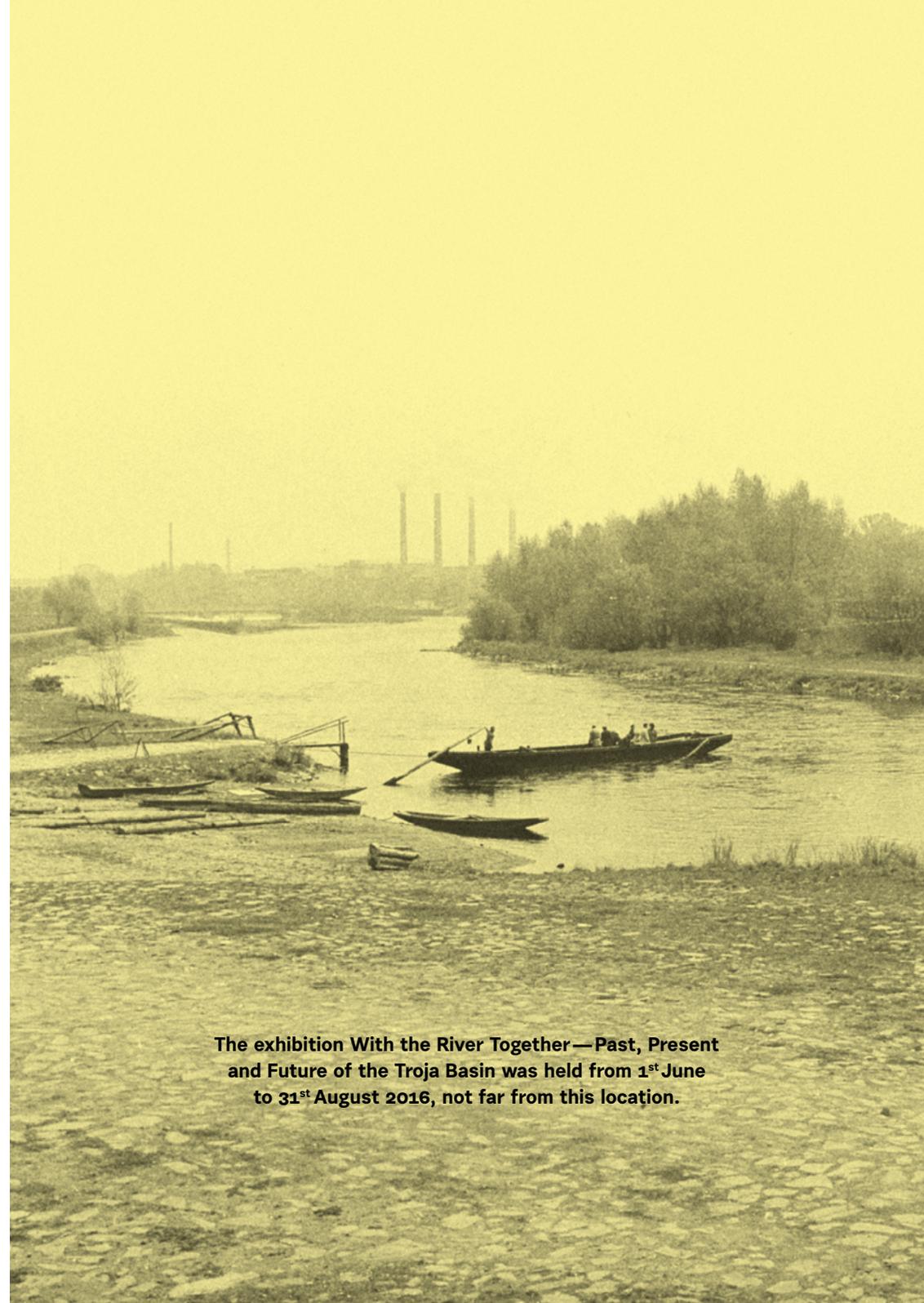
Production: Jitka Kulhánková, Sára Richterová, Marek Kundera

**Cooperation: Tomáš Drdácý, Roman Hrabánek, Tobiáš Hrabec, Nguyen The Anh,
Eva Wagnerová**

**Published by: Prague Institute of Planning and Development
Vyšehradská 57, 128 00 Praha 2
www.iprpraha.cz/cisarskyostrov**

ISBN 978-80-87931-61-5

© IPR Praha, 2016-05



**The exhibition With the River Together — Past, Present
and Future of the Troja Basin was held from 1st June
to 31st August 2016, not far from this location.**