

---

The Gabčíkovo Project –  
Saving  
the Danube's Inland Delta

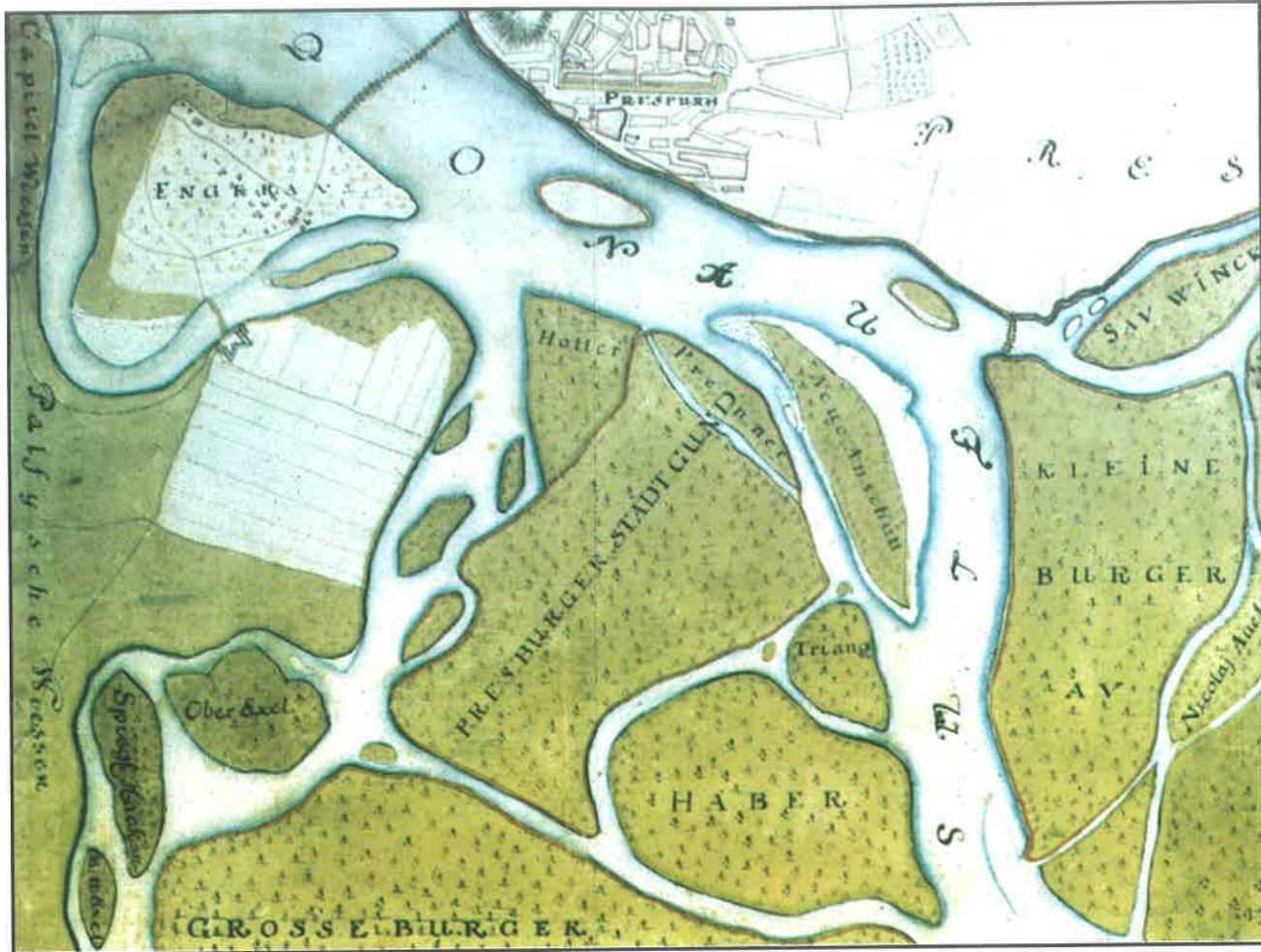


---

The Gabčíkovo Project –  
Saving  
the Danube's Inland Delta

---

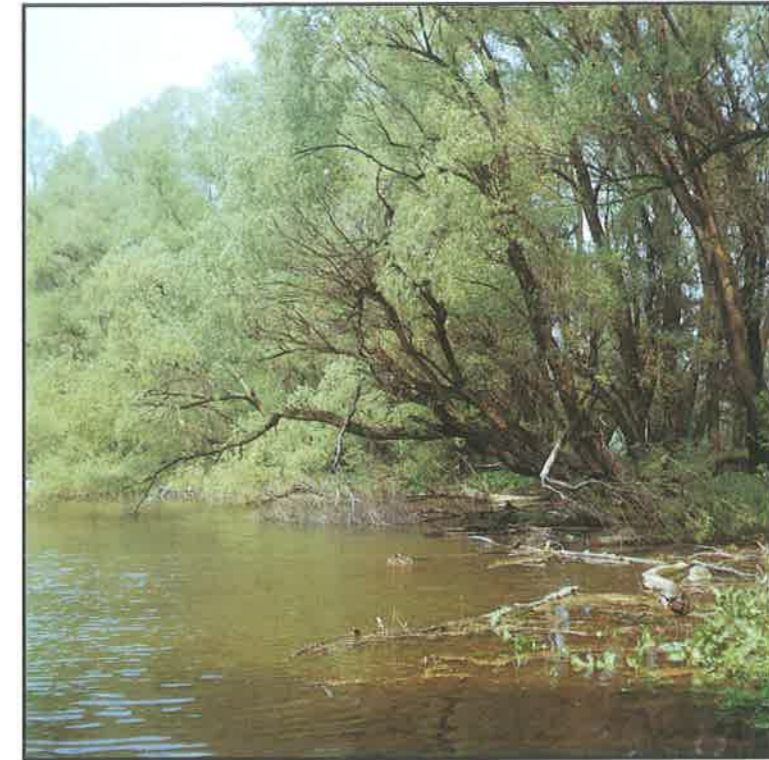
---



1. The Danube's delta  
in the town  
of Bratislava in 1712

ISBN 80-85401-05-3

## The Gabčíkovo Project – Saving the Danube's Inland Delta





The branch near the communities Holice and Jurová  
after being filled with water in May 1993

*Dear reader,*

*Thousands of hydroelectric projects have been built during the last century. However, none of them has faced such a systematic international campaign as has been launched against the Gabčíkovo-Nagymaros Project.*

*A variety of alleged disastrous implications for nature, fauna and flora, farming, woods, fishing, sources of drinking water etc. have been used as an excuse without taking into consideration the Danube's current adverse status.*

*At the present time the completed project is providing economic and environmentally precious benefits.*

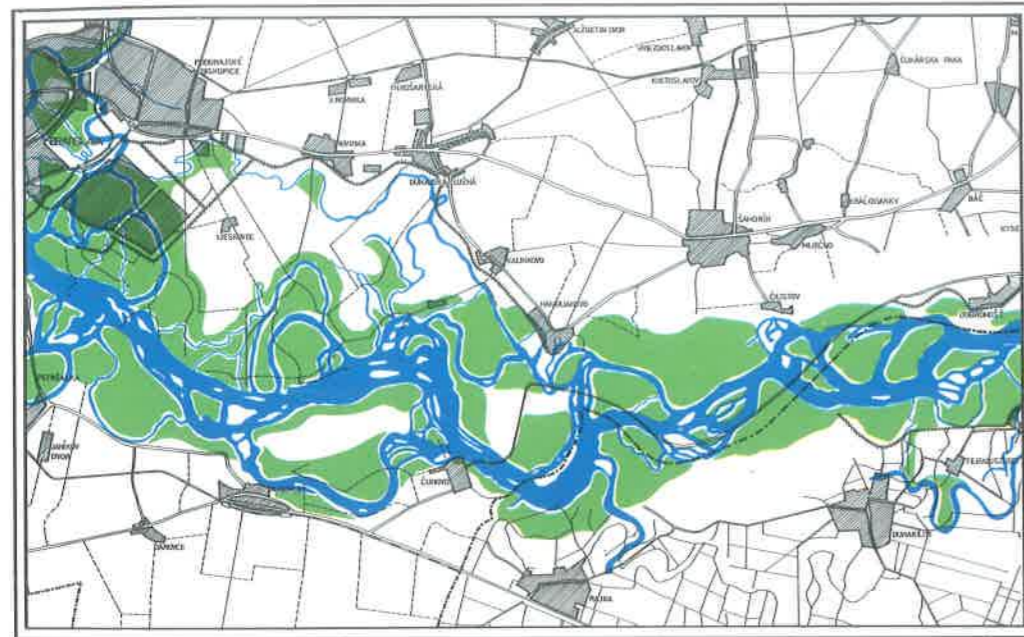
*In this publication we would like to make use of facts and of approximately a year's experience gained while operating the Gabčíkovo facilities, in order to prove to the world that all negative forecasts made about this project were unsubstantiated, fabricated for other than environmental purposes.*

*After reading this publication, the judicious reader will be able to conclude independently, who has waged and organized the anti-Gabčíkovo campaign and for what purpose.*

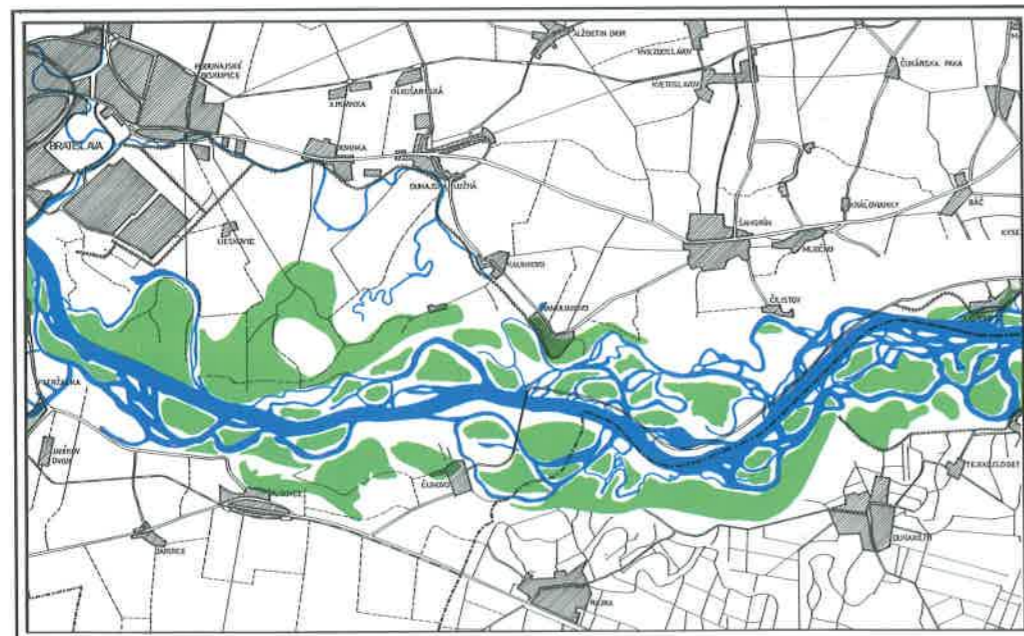
*We are pleased to be able to introduce the Gabčíkovo project with the aid of the facts and to give our acknowledgement to all those who have successfully put the project into operation despite the enormous obstacles.*

*Dipl.Ing. Július Binder  
Director*

*Vodohospodárska výstavba  
[Water Management Construction]  
State-Owned Company*



2. The Danube's delta along a stretch just downstream of Bratislava in 1780



3. The Danube's delta along a stretch just downstream of Bratislava in 1935

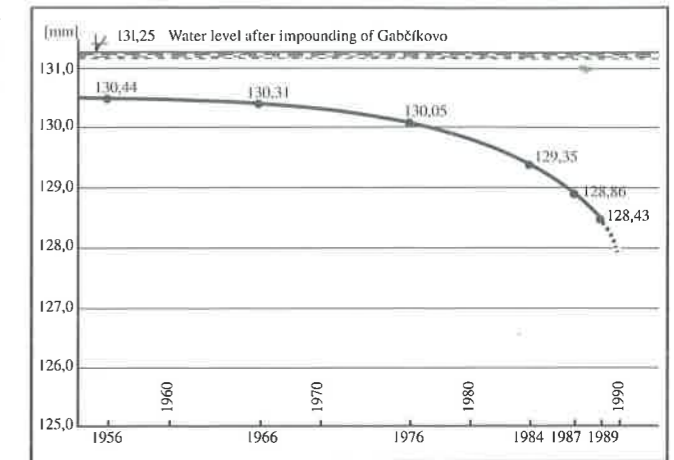
1

## The Central Danube and Central Rhine – unique natural phenomena

In the recent past there were two major inland deltas of Europe's two longest rivers: the Danube and the Rhine. On the Rhine, the inland delta was in the Alsatian depression and the Danube delta is situated in the Danubian depression on the border between the south-west of Slovakia and north-west of Hungary. Despite the fact that the Rhine delta has already almost disappeared, the Danubian one still exists although indications here over the past several decades have been suggesting a natural decline as well, and without help to the river it would be unavoidable.

The two deltas were created as unique natural phenomena under special circumstances owing to certain exceptional natural conditions, thanks to the specific configuration of the terrain as well as the geological structure of the area. Specifically, these two rivers change their gradient and with this their flow characteristics: becoming lowland rivers out of mountainous streams.

Since the Danubian inland delta is the only river remaining, of Europe's two unique natural



4. Graphic representation of the decline of the water level in the Danube over the past 30 years, a flow of 930 to 950 cumecs

phenomena, it is the responsibility of European nations to make sure that it is conserved for generations to come.

2

## The Creation of an Inland Delta along the Danube's Central Stretch

The Danube leaves mountainous Austria through the rocky sill of the Devín gate and flows onto the Danubian depression in Slovakia's south-west lowlands. Here long ago the river, flowed to the Panonian sea, where its flow gradient decreased and the flow velocity and carrying capacity slowly disappeared. The river has been depositing sand and gravel at this point since time immemorial, bringing it along from its mountainous track in the Alps. Because of this sedimentation activity, the current split into a multitude of branches. It was mainly during floods that the river changed its bed.

Thus the Danube's inland delta came into existence, its branches interweaving the vast lowlands.

The cultivation of the delta area, farming, flood control activities, date back virtually to the beginning of the 12th century when the area was becoming more densely populated. These activities resulted in a gradual contraction of the delta area. Out of an enormous multitude of branches which initially existed here, two major branches finally remained, namely the Small Danube, which demarcates the Major Žitný ostrov on the northern



5. Half dry branch near the community of Dobrohošť. The picture was taken in spring 1992 before the water works project was completed



6. The same branch as in Fig. 5 filled with water in May, 1993 through a facility built as part of the water works project

side, and the south-side branch called the Moson Danube, which delimits the Minor Žitný ostrov.

The delta began within Bratislava's confines as shown on the map (Fig. 1). The delta entirely and irreversibly vanished from this site over the past two hundred years,

A 1780 map (Fig. 2) gives an idea of what the Danube delta and its branches looked like in the late 18th century, at which time there was no stable main river bed.

In addition to soil cultivation, international navigation was for centuries a major factor influencing the Danube's flow. The northern-most

branch was used for navigation during the whole Middle Ages up to the 19th century. It was not until the second half of the 19th century that the shipping route near Bratislava definitively turned south, where with human endeavour, the present main river bed began to be formed.

The invention of the steam engine imposed greater demands on navigation and therefore work began in the late 19th century with the aim of establishing a 'united river bed', which at the same time meant a gradual decline of collateral branches as suggested by a 1935 map of the Bratislava region (Fig.3).

### 3

## Gradual Decline of The Danube's Branches

After World War II Austria started the construction of water-power projects along its entire section of the Danube.

The completion of these projects nearly resulted in a severe reduction of gravel movements in the river, which until that time amounted to

about 600,000 m<sup>3</sup> of gravel a year. In response to this, the river began to erode and deepen the gravel-bottom of its bed, decreasing its level at the same time. For instance, the level of the river in Bratislava has decreased by 2 m in the past 30 years (Fig. 4). These lowered levels in the Danube's



7. A rock-fill transverse structure near the community of Dobrohošť. The bed bottom is covered by old grass suggesting that the branch dried up regularly



8. A view of the same transverse structure after the branch was filled with water, May 1993



9. View of the dried branch near the community of Dobrohošť. The background view shows that the branch was dry before the damming of the Danube



10. The same view as in Fig. 9 after the branch was filled with water in May 1993

main bed resulted in a situation where collateral branches of the river were only supplied during periods of high water and remained half empty during most of the year. As a result many of them dried up regularly. Half empty or dried up branches are shown in



11. The dry Rusovce branch (near the community of Rusovce) and its consequences for the surrounding vegetation

Fig. 5, 7 and 9. Thus, the little Danube in Slovakia and the Moson branch on Hungarian territory was without water during the greater part of the year (on average 83 percent of the time).

The lowering of the Danube's level was accompanied by a declining ground water table in the wetland wooded area which began to dry out (Fig. 11).

Since the water table continued to decline be-

cause of river bed dredging necessary to maintain navigation, the disappearance of wetland woods on either side of the Danube would have been unavoidable just as in the previous century on the Rhine, before the construction of dams.

However, the situation in the half empty branches as well as in the Mošon branch has changed after the commissioning of the Gabčíkovo project as shown in Fig. 6,8 and 10.

## 4

### River Branch Disappearance on the Rhine

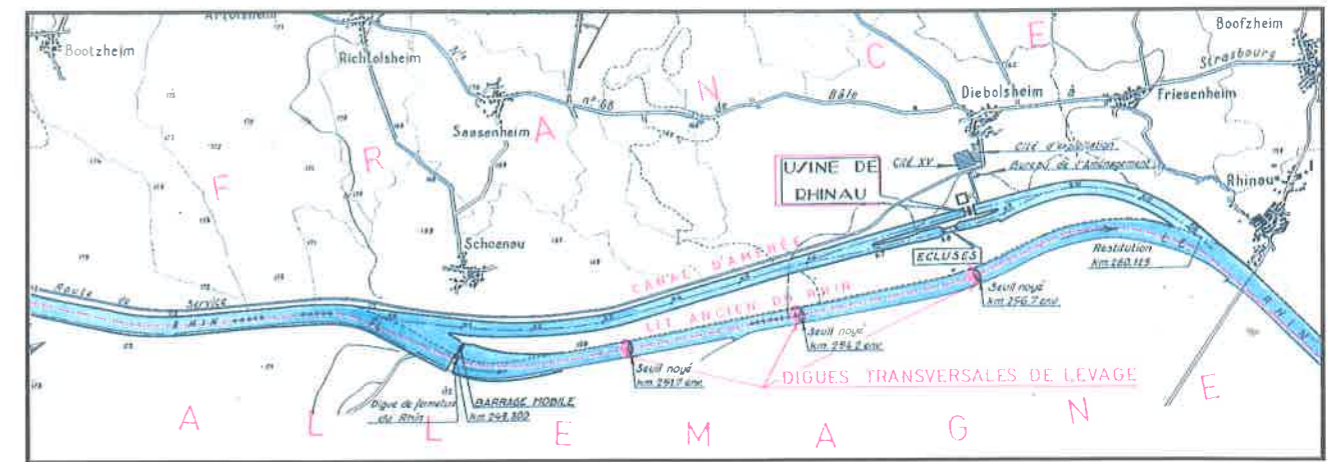
The Rhine's branches had begun to disappear half a century before a similar process began on the Danube. This happened because works to adjust the "united" river bed started as early as the first half of the 19th century.

The Rhine delta and its branches had a pattern similar to that of the Danube, as is shown in a 1780

map of the Rhine (Fig. 12), i.e. in a period before the French Revolution. The map suggests that at this time the Rhine did not have a stable river bed because the river changed after each flood. This was a major problem for intensively growing international navigation, as well as for the demarcation of a fixed border between Germany and France.



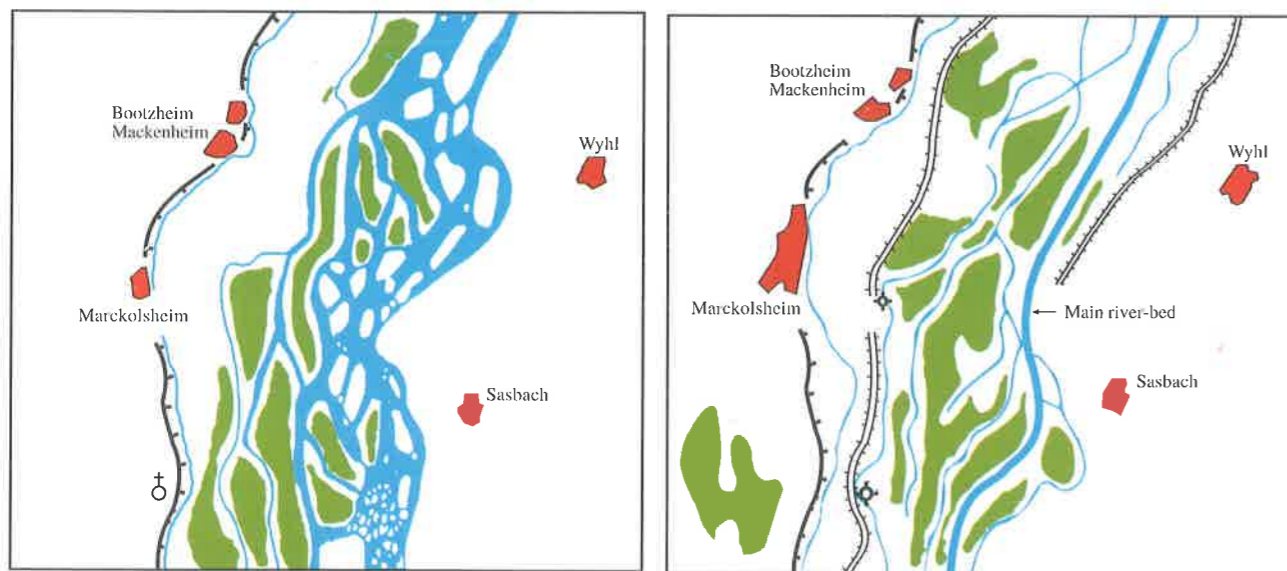
12. Part of the Rhine delta in 1780.  
The figure shows that the Rhine delta at the time was similar to the Danubian one (cf. Fig. 2)



14. The layout of the project on the Rhine with transverse barrages marked in the old river bed.  
The picture also shows the course of the border between Germany and France after the project was completed

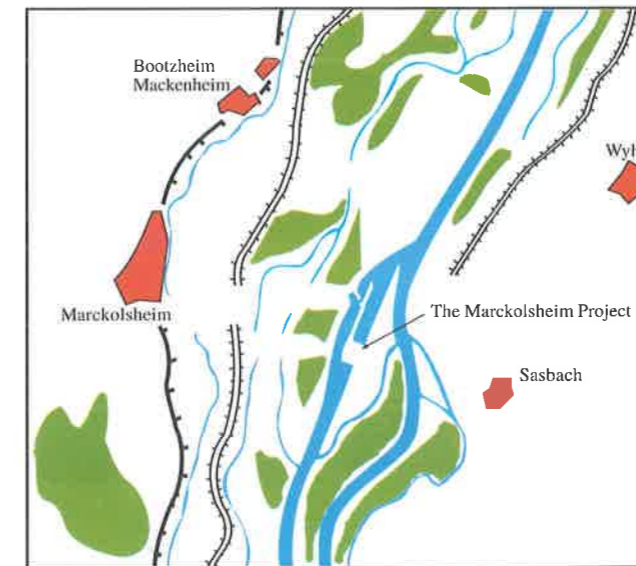
The shortening of the river bed by 14% known as the Tullov regulation increased the flow gradient and triggered certain erosion activity in the bed which became substantially deeper, bringing about a gradual disappearance of most branches. The development over the past 200 years is shown in the outline maps of the Rhine delta segment near the community of Marckolsheim

(Fig. 13) which document the fact that the branches had disappeared long before the projects on the Rhine were constructed. A 1935 map shows that the branches had been substantially reduced already about twenty years before the Marckolsheim Project was even started. The branches pattern did not change at all after the project was completed.



The 1780 status. A 'single river bed' had not been created yet

The 1935 status after the implementation of a 'single' river bed before the hydrotechnical project was built

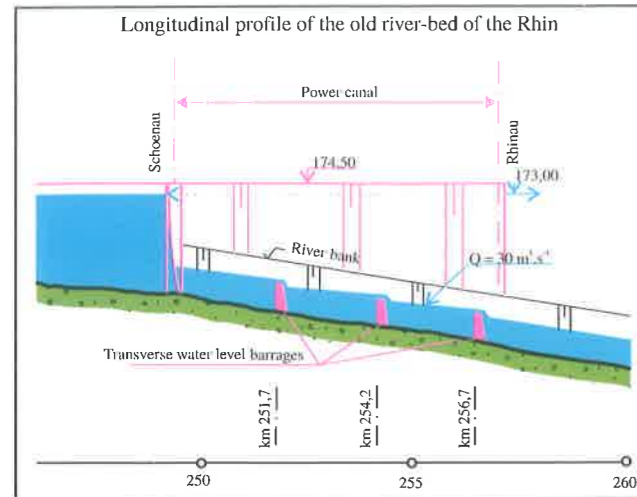


The 1964 status after the completion of the Project

13. The changes of the Rhine's bed over the past 200 years.  
The unification of the river bed resulted in the decline of most of its branches

- Limitation of the low terrace
- Flood control levee
- Wood
- Settlement
- Mill

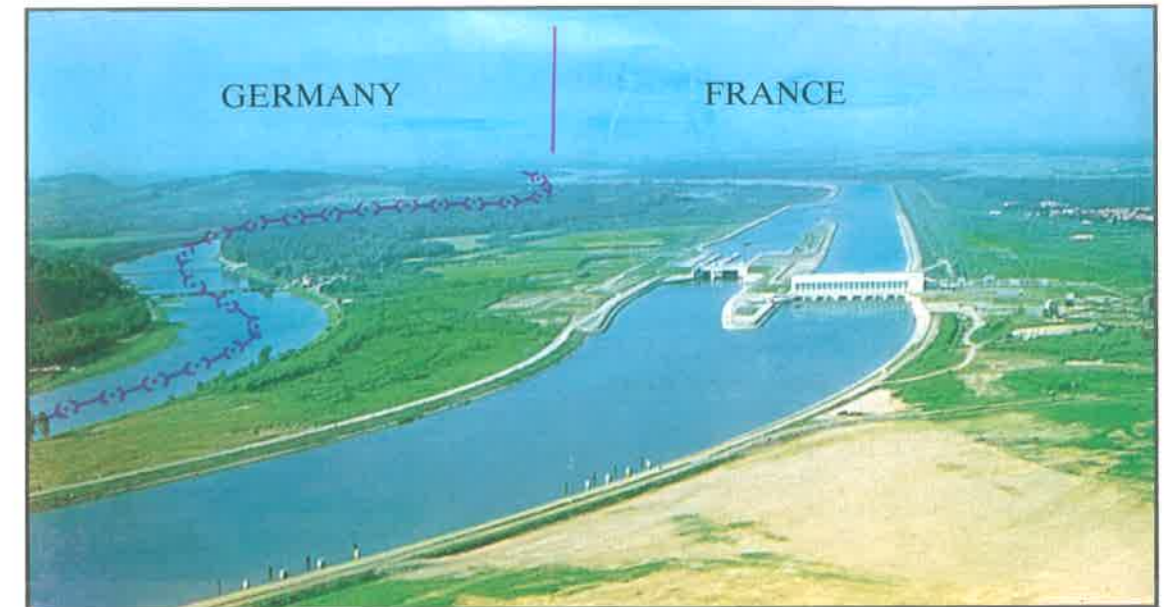




15. A facility built at the Rhinau Water Works on the Rhine to ensure the conservation of the remaining branches and surrounding woods. Thanks to this facility, sufficient regulation of the average water flow, approximately 2-3% ( $17-27 \text{ m}^3 \cdot \text{s}^{-1}$ ), will continue for decades



16. A view of the transverse barrage with fish pipeline on the Rhine's old bed at the Rhinau Water Works



17. A view of the Marckolsheim Water Works

## 5

### How Feasible is the Preservation of the Delta, its Branches and Wetland Woods?

In trying to find a solution to this problem it is highly expedient and essential to refer to the expertise of the French engineers acquired on the Rhine. It is all the more indispensable because the natural conditions on the Rhine are very similar to those around Gabčíkovo.

Whereas the first four projects with diversion canals on the French side were not accompanied by the construction of any facilities in the original river bed, the other six, i.e. Marckolsheim,

Rhinau, Gerstheim and Gamsheim, Iftzheim Strasbourg included special transverse barrages in the original river bed raising the water level sufficiently to preserve the branches and woods. The amount of water allowed into the original river bed was relatively small, a mere 2-3% ( $17-27 \text{ m}^3 \cdot \text{s}^{-1}$ ) of the Rhine's mean flow ( $1000 \text{ m}^3 \cdot \text{s}^{-1}$ ). The remaining larger part of the flow was fed into the canal to generate electricity and enable navigation.

This solution is shown in Fig. 14 and 15.

## The Environmental Impact of the Rhine Projects

The effectiveness of the nature conservation measures taken in conjunction with the Rhine projects is best shown on the pictures of the transverse barrage in the Rhine's old bed (Fig. 16) and the view of the completed Marckolsheim project (Fig. 17).

The two pictures demonstrate that the two projects fit the environment well and have become one of its inseparable components.

Optimal conditions were created for nature conservation as well as the preservation of branches and woods, for the advancement of farming and pisciculture and sustaining underground water resources supplying virtually all towns and communities in the Alsatian lowland. The Rhine region is the most fertile agricultural area in France, a region whose underground water table has held, in spite of its general decline in all of central France.

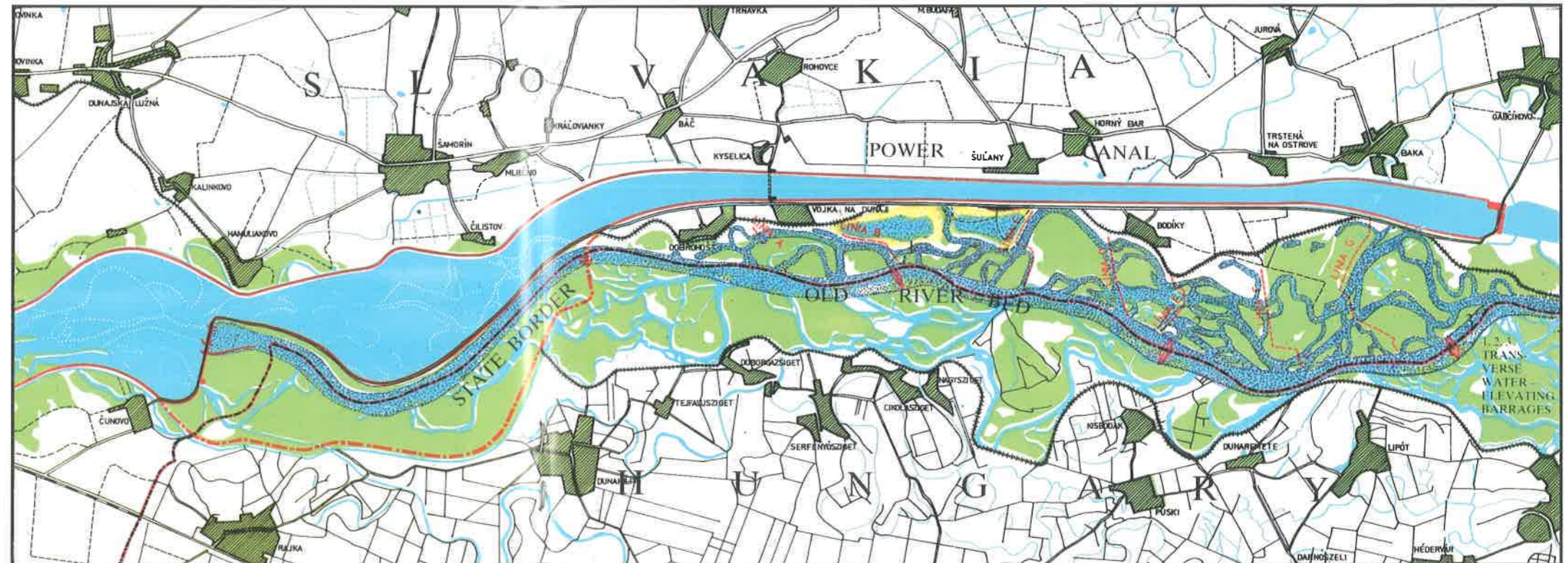


19. The inlet structure of the branch system near Dobrohošť. The picture shows the commencement of feeding water into the System in the early days of May 1993

## The Technical Solution of the Gabčíkovo Project in View of its Environmental Impact

After many years of studies an alternative was finally chosen, with a reservoir placed in the vicinity of Bratislava and a diversion channel on the left bank, i.e. the Slovak side, while the Nagymaros stage was situated on Hungarian territory. With regards to the route of the diversion channel, it should be emphasized that it led outside inundated areas and the Danube delta (Fig. 18). This is, in comparison with the construction of dams on the Rhine, an invaluable experience from the point of view of preserving deltas for future generations of Europeans. Diversion channels on the Rhine are built in inundated areas, thus destroying the chance to preserve the river delta as a unique natural form.

It should be noted that, notwithstanding the fervent continual attacks waged against this project at high international forums by Hungary's political leadership and despite catastrophic predictions, these water projects on the Danube have invaluable environmental benefits. The experience gained on an already functioning hydraulic project has already demonstrated the usefulness of this



18. Layout of the Gabčíkovo Water Works with transverse barrages marked in the old river bed and on the inundated area



20. A regularly dried up branch near the community of Vojka



21. The same branch as the one shown in Fig. 20 after being filled with water, May 1993



22. A branch upstream of the community of Bodíky, as it looks 10 to 11 months of the year. The branch used to be filled only during flows greater than  $4000\text{m}^3\cdot\text{s}^{-1}$  in the Danube

23. The same branch as the one shown in Fig. 20 permanently filled with water, May 1993

project as well as the acumen and farsightedness of the engineers who designed it, on both sides of the banks of the Danube.

The principal environmental benefits of the project are as follows:

- The reservoir placement at a site where the Danube's water enters the Žitný ostrov subsoil and the elevation of the river level by several meters at this site makes the ground water regimen dramatically more dynamic in the entire region, thus contributing to the diluting and washing away of water layers contaminated by farming.
- An increase in the water level at the reservoir site will increase the volume of water filtered into the subsoil, water suitable for drinking, water supply and irrigation.
- Elevation of the water level in the reservoir will provide continuous water supply to the branches as required throughout the year, including periods of generally low levels when the branches are usually half dry or completely dry. This will create conditions for the revitalization and las-

ting conservation of the Danube's delta as well as diversifying this region's flora and fauna, which due to unfavourable conditions has markedly diminished over the past years.

- The placement of the diversion channel outside the delta area will separate the river's economic functions, i.e. electricity generation, navigation and flood control measures, from its biological function. Thus, conditions will be created on a 30-km long stretch for an undisturbed natural preserve with fully developing flora and fauna, pisciculture, hunting, forestry and recreation areas. Based on the November 1992 report by a group of KES research scientists (experts), which states that "if the waterway doesn't make use of the Danube's riverbed over a its 40Km length, a unique situation will evolve, where with the help of technical measures it will be possible for the river and its inundation areas to develop naturally."

This is in sharp contrast to the current status when the region is threatened with decline and devastation due to the low water levels in the Danube.



24. A half dry branch near the community of Šulany

## Technical Provisions for the Conservation of the Danube's Delta

Over the past decades the Danube's bed has significantly deepened(par.4). Diverting part of the Danube's flow into the canal caused a further decrease of the water level and also raised the draining properties of the bed.

Two types of nature conservation provisions have been proposed in the design to save and improve the natural state of the the Danube's inland delta and canal section.

- a) provisions along the inundation area
- b) provisions in the proper river bed.

The provisions in the proper river bed have a certain "mutual investment" character, which according to paragraph 5 of the 1977 treaty states that the Hungarian side is responsible for the quality and ti-

mely completion of the project. In addition, the interdam(inundation) areas provisions have a "national investment" character indicating that it is each side's responsibility to secure the necessary provisions based on individual territorial requirements. From this it follows that any damage, caused by delayed or careless execution of provisions in the old bed and legally owned inundation, is the full and exclusive responsibility of the Hungarian side.

### Provisions on the left bank inundation

Impounding facility lines have already been built, on the left bank in the form of embankments and in inundation areas with spillways and outlets. There is a total of 7 such lines(they are marked with the letters "A" to "G") which together form 8 closed areas



25. The same branch near the community of Šulany after being filled with water, May 1993



26. A completely dry branch near the community of Bodíky. The branch was only filled with water during flows in the Danube above  $4000 \text{ m}^3 \cdot \text{s}^{-1}$



27. The same branch as the one in Fig. 26 after being filled with water, May 1993



28. A major branch downstream of the community of Vojka after being filled with water. May 7, 1993

with a required water level kept impounded in a cascaded grade. (Fig. 18).

If needed, artificial flooding can be effected in the area. The entire system will be supplied with water in amounts of up to  $250 \text{ m}^3 \cdot \text{s}^{-1}$  as required through the inlet structure, near Dobrohošť, which was commissioned in early May 1993 (Fig. 19). The photographs numbered 20 to 30 demonstrate how empty or half empty the branches have been because of the low water levels in the Danube bed, usually 10-11 months of the year, and what they look like after having been filled with water on completion of the project.

The photographs of the branches were taken along the entire length of the delta. They illustrate what state the branches would be found in for a greater part of the year (10-11 months) before the damming of the Danube. Redirecting a portion of the

flows at this point would have changed nothing because it required a flow rate of  $4000 \text{ m}^3 \cdot \text{s}^{-1}$  in order for the water to reach the closed off branches.

Already in March 1993, a provisional pipeline began to fill the system of branches at a flow rate of  $7 \text{ m}^3 \cdot \text{s}^{-1}$ . The water inlet structure at Dobrohošť was completed and put into operation in early May 1993. Water started to flow into the branches in volumes of approximately  $60 \text{ m}^3 \cdot \text{s}^{-1}$  and successfully filled all left-bank branches. It was indeed a historic moment because it marked the instant when water flow into the branches would be permanently secured and the danger of the delta's decline would be eliminated for ever. Water means life.

All the photographs of water-filled branches with lush vegetation substantiate these hopes, and one cannot conceive of better proof of the success scored in preserving the Danube's delta.



29. A half dry branch near the community of Trstená na Ostrove

#### Provisions in the old Danub bed

In addition to the measures to be taken in the flooded areas, the design envisages small transverse weirs to be built in the original river bed as shown in Fig. 18, 31 and 32. There will be a total of five such weirs designed to elevate the water level in the Danube's old bed to the natural flow of  $1,340 \text{ m}^3 \cdot \text{s}^{-1}$  which is assumed to provide optimal conditions for branch and forest conservation and development. Thus, the function of transverse barrages in the Danube's bed will be supplemented by small weirs in the branch system. These weirs could be used to create a flood control mechanism that would be used to fill the branches along the right side of the Danube thus solving the problem of a low underground water table in this and surrounding areas.

Under such circumstances 50 to  $200 \text{ m}^3 \cdot \text{s}^{-1}$  of water could be fed into the old river bed as stipulated under the 1977 Agreement.

These transverse weirs have not yet been built. Their construction was to coincide with the damming project so that its effects would already manifest themselves in the following growing season.

The Hungarian side failed to construct the we-

irs and even prevented the Slovak side from successfully completing the project. The Hungarian side did not take even partial advantage of the high flood waters to construct the Dunakiliti dam project, which would have connected the branches and guaranteed the conservation of the forests between the Dunakiliti dam and Čunovo. The decision to dam the Dunakiliti, by the appropriate ministry, was halted by the Hungarian Parliament.

#### Provisions on the right bank inundation

On the right side of the Danube are 2 systems of branches. The outer branch, within the protected territory behind the flood dike (Zátonyi Danube), is connected to the renewed Mošony Danube branch through a seepage canal.

The interior system of branches (Szigeti Danube) between Dunakiliti and Čunovo should be flooded within the reservoir. Its filling is made possible by damming the Danube and Dunakiliti.

It is necessary to erect inundation (flood) dikes in the old Danube bed in order to fill the interior branches. The offer made by the Slovak side to secure, within a short time, the filling of these branches was not accepted.



30. A branch near the community of Trstená na Ostrove after being filled with water, May 11, 1993

## 9

### Hungarian Objections to the Damming Project on the Danube

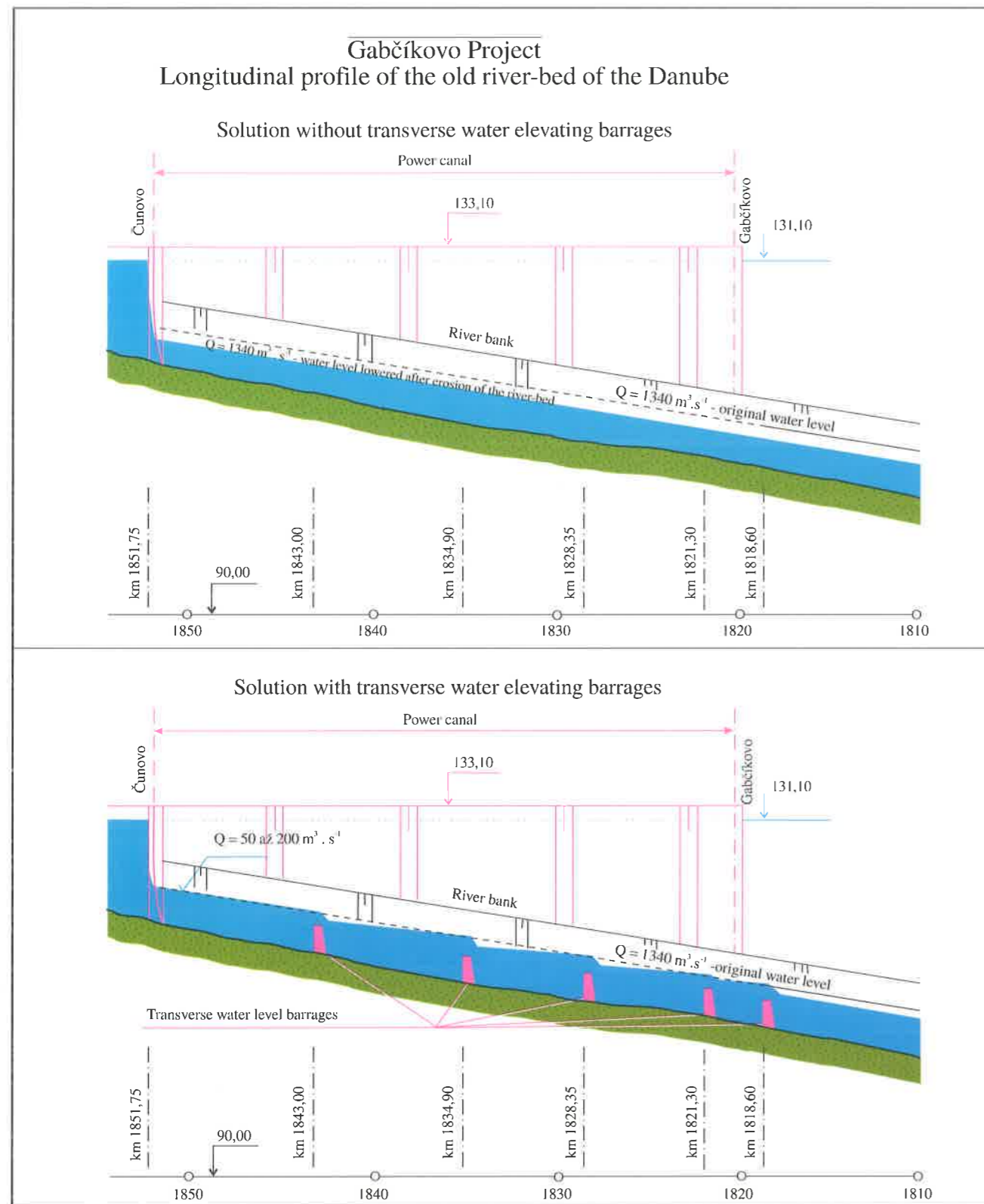
The campaign against the Gabčíkovo Project, which has been staged abroad by Hungary's political leadership for several years now, is continuing. Instead of attempting to clarify the problems on a technical level the campaign has recently assumed a purely political dimension and it has concentrated on these four points:

1. In February 1993 the Hungarian parliament appealed to all of the world's parliaments with a document accusing the Slovak Republic of violating Hungary's border and territorial integrity as well as international conventions. In fact, the media suggest the Danube was stolen.
2. With respect to the European Community, Hun-

garian diplomats managed the inclusion in the minutes prepared during the October 28, 1992 London talks of a provision whereby 95% of the flow of the Danube was to be fed into the old river bed. This is in sharp contrast to the original international Agreement and would signify a total loss of value of the Project.

The European Community accepted these minutes as the basis and the initial point from which to view the dispute between Hungary and Slovakia over the Gabčíkovo project.

3. In January 1993 members of parliament representing ethnic Hungarian parties in Slovakia submitted to the European parliament a complaint



31. Branch and wetland woods conservation by ensuring an adequate water level through a system of transverse barrages.

The upper picture shows that the level of water needed to save the woods and branches corresponded to a flow rate of about  $1,340 \text{ m}^3 \cdot \text{s}^{-1}$  and could not be provided before the water works construction and was not feasible without elevating the water level by artificial structures.

On the contrary, the lower picture shows that this level can be secured by erecting transverse barrages already at the flow rate of 50 to  $200 \text{ m}^3 \cdot \text{s}^{-1}$ .

against the Slovak Republic arguing that the project would have disastrous environmental implications, as well as catastrophic effects on the underground water level.

4. The Hungarian side continues to complain that the Slovak Republic suppresses and endangers the ethnic Hungarian minority in Slovakia and presents these complaints in relation to the allegedly poor quality construction of the project.

## 10

### What is the reality?



32. The branch near the community of Baka after being filled with water

#### 1. Hungary's border and territorial integrity

Fig. 14, 17, 18 and 32 show the borders as they relate to the Rhinau on the Rhine and the Gabčíkovo one on the Danube. It is obvious that the course of the border as it relates to the two water works projects, which have the same layout, is also the same. The only difference is that Germany never launched a complaint against, made objections to, or cast doubt on the validity of an in-

ternational agreement according to which the project was built and the border was drawn. Besides this, resolution of a permanent border dispute is explicitly outlined in paragraph 22 of the 1977 treaty: The border within the section of the reservoir and canal remains "in the centre of the present day main navigational riverbed stream (channel)".

#### 2. Saving and improving the status of the inland

### Delta of the Danube

Of crucial importance for improving the status of nature and the Danube's delta conservation is not the volume of water in the old river bed but its level. The deepening of the riverbed and a reduction of the groundwater table resulted when the flow was both full and natural. The solution used for nature conservation on the Rhine water work projects was not the discharge but the water levels when approximately only 2-3% of the original flow was fed into the old river bed. A request to release a larger portion of the flow into the old riverbed is in variance with the legal agreement. A release of flow into the bed would mean a partially useless waste of effort on the part of the Gabčíkovo hydro-electric plant, and a reduction in the environmentally friendly production of electrical energy would have to be compensated for by the burning of coal, thus increasing the eutrophication properties of the water in the reservoir and the canal.

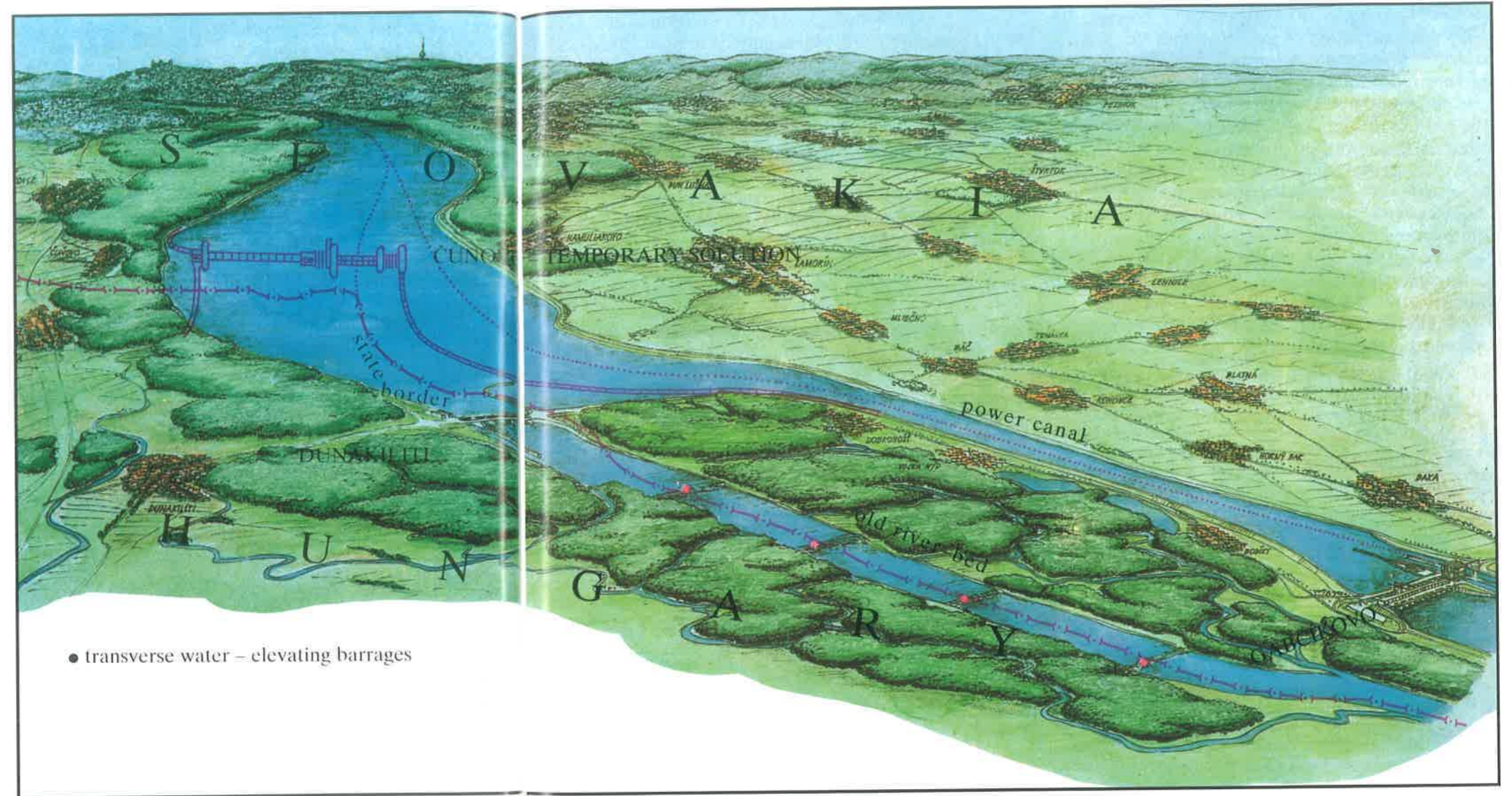
### 3. The level, productivity and quality of underground water

**Underground water table level:** A favourable rise within the surrounding territory of the Slovak Republic (below Bratislava as much as 3 m). A decreased level, which was discovered in only 6% of the influenced area, was compensated for by flooding the system of leftside branches. In view of this, it was not possible to secure the same kind of improvements in the status of right side underground water table because the Hungarian side did not construct the provisions in the old Danube bed.

**Underground water table quality:** The supply of drinking water is unchanged, despite an increase in well capacity of between 30-40%. In fact it has improved within the reservoir on the right side of the Danube, including an increased oxygen content. Increasing the level of the underground water basin from the reservoir increases the dynamics of the flow. A very unclean upper layer of underground water dilutes itself and is forced out, and the seepage canals supply a rich source of irrigation and useful water.

### 4. Influence on the population

One of the main impulses to construct the Gabčíkovo-Nagymaros Project was because the population demanded, following a catastrophic flo-



● transverse water – elevating barrages

33. Overall view of the Gabčíkovo Project.

Marked in the picture are transverse water barrages in the old river bed and the course of the border after the project was completed



34. The branch near the community of Suľany



ods in Hungary in 1954 and later in Slovakia in 1965, a higher level of security with definitive counter flood protection measures. The Gabčíkovo project fully supplies the protection by separating flood flows and decreasing the burden on the old flood dikes, especially the subsoil with its smooth, shore washed gravel.

The Hungarian media, within the framework of an intensive anti-Gabčíkovo Nagymaros campaign, spread unfounded rumours and fear among the Danube delta inhabitants alleging unsatisfactory quality standards with respect to the project's construction. But the main judge of the hydroelectric project is the water itself.

Inhabitants living around the Danube region, without regard to nationality, are the immediate

users of the surrounding wealth. In addition to antiflood protection and improving the natural environment, the Gabčíkovo project offers the population a variety of recreational water sports, tourism, and in the future prospective territorial economic development and employment opportunities.

Minority suppression in contemporary Europe is best demonstrated by way of statistical data. According to the latest census, there are only about 10,000 Slovaks presently living in Hungary, although at the time of the 1920 Trianon Agreement there were 630,000 ethnic Slovaks in the country (see 'Recueil des Actes de la conférence, Part IV, p. 30). By contrast, the ethnic Hungarian population in Slovakia has been preserved in its original number of approximately 600,000.

## Epilogue

*In this paper we made an attempt to bring in facts and argumentation relating to the Rhine water work projects as well as nearly a year's experience in the operation of the Gabčíkovo project in order to persuade the world public opinion, as well as to draw attention to the reality, that the Gabčíkovo project and entire system of dams at the Gabčíkovo=Nagymaros Project is not a damaging element to the environment or the population as the propaganda campaign has been claiming for years. In fact, the opposite is true, environmentally the project is very beneficial.*

*The catastrophic predictions were not fulfilled, actually the complete opposite is true - natural conditions have improved not worsened: predictions that, 50,000 Hectares of farmland would dry out, agriculture and drinking water sources would be destroyed, and nature along the unique phenomena of the Danube's inland delta would be extinguished, failed to live up to reality.*

*All left side branches are filled with water (the right side suffers the consequences of a lack of cooperation on the part of Slovakia's partner). The new, permanently favourable conditions will attract a larger diversity of fish, birds and wildlife.*

*Local people do not live in fear, on the contrary, they are coming to admire the water works and its revitalized natural surroundings.*

*It should be appreciated that a young Slovak Republic has not yielded to the hostile propaganda campaign mounted against the water works and has not allowed itself to be intimidated by attacks coming from all sides because it believed that the truth was on its side and because it trusted the technical skills of the engineers who had completed the Gabčíkovo project. The water works is not quite ready, it must be completed. It also needs some additional adjustments and a few finishing touches to give it its final aesthetic looks. This, however, does not in the least alter the fact that after decades of preparation and almost 15 years of extensive construction work the project meets all its objectives:*

- *shielding the entire neighbouring region against the dangers of disastrous flooding and giving the local population a feeling of serenity and security;*
- *providing virtually ideal conditions for international navigation at areas where there had been shallow waters before; barges can now quietly cruise the Danubian waters without having to unload and then reload part of their cargo, conserving fuel and producing fewer exhaust fumes.*
- *generating electrical energy the most environmentally friendly way, and thus utilizing an endless, renewable domestic resource.*
- *halting the erosion process of the river floor and the diminishing of the underground water table and all its adverse effects on nature and the community.*
- *filling with water the parched, and for a large part of the year empty, branches of the Danube's delta and bringing back water to the wetland woods and thus rescuing them from impending ruin; attracting to the Danube's revitalized branches a host of waterfowl and fish species and creating new ideal conditions for wildlife;*
  - *creating ideal conditions along a 50-km stretch for the establishment of a new national park and a nature preserve of an international stature, unique in its kind in Europe.*

*It is necessary to stress, that all the mentioned contributions are incomplete without completion of the second half of the system - the Nagymaros water project, which was originally designed as an inseparable part of the mutually productive (Slovak-Hungarian) section of the Danube.*

*We are appealing to representatives of all European countries to acknowledge this agreeable attitude and action of the Slovak Republic in the Gabčíkovo case as positive. Slovakia has not responded in a bellicose manner to all the slander and attacks waged against her in the diplomatic world by the world's mass media but, on the contrary, she chose instead to fulfill her agreements and to use facts in order to convince the international public.*

*At the same time we would like to invite all representatives of European states and the European Community to come over to Gabčíkovo to see the project with their own eyes and thus be convinced of its effectiveness. What they will see there will be a magnificent man-made accomplishment and next to it a gorgeous revitalized Danubian landscape with a multitude of branches and a host of water fowl. They will certainly start wondering:*

- *Isn't the controversy concerning the construction of Damming projects along the Danube pointless*
- *Is it possible, to doubt for even a moment the sincerity of the Slovak side, which constantly fulfill its international duties with the interest of all Danubian nationalities in mind.*

*By respecting the rights of others Slovakia is creating basic conditions for a friendly and agreeable cohabitation with those nations interested in developing a united Europe.*

*Bratislava, 1993*

*Compiled on behalf of a large group of research associates and technology specialists  
by Ing. Vojtech Hraško and Miroslav Liška CSc.*

*Vodohospodárska výstavba [Water Management Construction]*

---

---

The Gabčíkovo Project –  
Saving  
the Danube's Inland Delta

VOJTECH HRAŠKO

Reader: Ing. Miroslav Liška, CSc.

Graphic designer: Kveta Dašková

Authors of the photographs: Ján Vincent, Ján Najšel, Miroslav Liška, Jozef Ponec

For the: Vodohospodárska výstavba, the state enterprise, Bratislava,  
Karloveská 2, publisher: Q 111, Bratislava, J. C. Hronského 4

Editorial: Representative for the Publisher: Kveta Dašková

The 1st edition

Printed by: Kasico a.s., Bratislava

ISBN 80-85401-05-3





Q.III

ISBN 80-85401-05-3