Danube River Basin District

Part B - Report 2003

CROATIA

Information required
according to Art. 3 (8) and Annex I
of the EU Water Framework Directive

Reporting deadline: June 22, 2004

Prepared by the Ministry of Agriculture, Forestry and Water Management
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Information required according to Art. 3 (8) and Annex I WFD

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1 INTRODUCTION

1.1 Situation in Croatia

Croatia ratified the Convention on the Cooperation for the Protection and Sustainable Use of the Danube River 1996 and from that time on has been actively participating in the work of the ICPDR. After the WFD came into force in the year 2000, Croatia has supported the implementation of the WFD on its territory and cooperated within the framework of the ICPDR with the aim to achieve a single, basin-wide coordinated DRB Management Plan.

According to the conclusions of the VI Plenary Session of the ICPDR, the ICPDR will send a copy of the national reports 2003 also of those countries not obligated to report to the European Commission. This report serves for better understanding of the Croatian part of Part A (roof of the DRBMP) and gives all relevant information on the national level. The final reports required by the WFD will be a part of the negotiation procedure between Croatia and the EC.

The important role of water in life and socio-economic developments is a well-known fact, which needs no special elaboration. With respect to the quantities of this natural resource, the Republic of Croatia is among the richest countries in Europe. Renewable water resources amount to approximately 45 billion m$^3$ per year, or 9,500 m$^3$ per person, of which renewable quantities of surface water amount to 39 billion m$^3$ per year. Approximately 60% of these water resources originate in Croatia, with the remainder flowing in from the neighbouring countries. The annual available groundwater quantities amount to approximately 6 billion m$^3$. Rivers, or the sea, form almost all state borders. The rivers in the northern and eastern Croatia are tributaries of the Sava and Drava Rivers, which are in turn tributaries of the Danube River, and as such belong to the Black Sea catchment area. All rivers in the area of western and southern Croatia flow into the Adriatic Sea, thus belonging to the Adriatic catchment area. Due to these hydrogeographical characteristics, Croatia recently celebrated 125 years of the existence and tradition of organized water management. Already in 1891, Croatian parliament passed the Water Rights Act of the Kingdom of Croatia and Slavonia, which included provisions on the legal regulation of water, riverbeds and the coast, water use, regulation of watercourses and other waters as well as flood protection, protection of water, water associations, loads and services, and the issuing of permits and other administrative acts.

On the governmental level, the Ministry of Agriculture, Forestry and Water Management - Directorate for Water Management is responsible for water management. (This will be further elaborated in Chapter 2 - Competent authority).

Other ministries and state bodies in Croatia important for WFD implementation are:
- Ministry of Environmental Protection, Physical Planning and Construction
- Ministry of Culture (Directorate for Nature Protection)
- Ministry of the Sea, Tourism, Transport and Development
- State Institute for Nature Protection

The fundamental laws that regulate water management in Croatia are: the Water Act and the Water Management Financing Act. The main principles of the Water Act are very similar to the main principles of the WFD, but the harmonisation of Croatian legislation with the WFD and related Directives has not been done yet. It is a subject of a project within the CARDS 2003 program.

According to the Water Act, the territory of the Republic of Croatia is, for water management purpose, divided into water basins districts and catchments areas. The water basins district comprises of one or more catchments areas of major river watercourses, of parts thereof, constituting a natural hydrogeographical entity. The water basins districts are:
- Danube River Basin
  1. Water basin district of the Sava River catchment area
  2. Water basin district of the Drava and Danube catchment areas
- Adriatic Basin
  3. Water basin district of the Littoral and Istrian catchment areas
  4. Water basin district of the Dalmatian catchment areas

The borders of the water basins are defined by the Government of the Republic of Croatia.

For the purpose of performing of activities constituting the water management, the Water Act establishes a legal entity (agency) under the name Croatian Waters (Hrvatske vode).

For the purpose of operative management of the water system, the following organizational units are established:

1. Water Management Department of the Sava Basin, with the seat in Zagreb;
2. Water Management Department of the Drava Basin, with the seat in Osijek;
3. Water Management Department of the Littoral and Istrian Basin, with the seat in Rijeka;
4. Water Management Department of the Dalmatian Basin, with the seat in Split;
5. Water Management Department of the City of Zagreb, with the seat in Zagreb.

The planning basis for water management is the Water Management Master Plan of Croatia and the water management plans and schemes of the catchment areas.

The Water Management Master Plan of Croatia is a long-term planning document defining the base of water management, water balance and improvement of the water system, ensuring an integrated and coordinated water regime in the Republic of Croatia and in each water basin.

The Water Management Master Plan of Croatia determines, in particular: distribution, supply and properties of water, water requirements in all segments of life, work and other activities, and the method of providing sufficient water quantity of water adequate for such purposes; provides for water protection from pollution, determines optimum technical and other solutions for watercourse regulation, protection from floods and other adverse effects of water, and other solutions of importance to water management and ensuring an integrated water regime.

In the Water Management Master Plan of Croatia we have introduced some requirements of the WFD. All topics from Annex VII. of the WFD will be covered by water management plans of the catchment areas.

1.2 Structure of the report

The Danube River Basin Management Plan (DRBMP) is divided into two parts. Part A (roof of the DRBMP) gives relevant information of multilateral or basin-wide importance, whereas Part B (national input to DRBMP) gives all relevant further information on the national level as well as information coordinated on the bilateral level.

Part A – Roof report

The roof report addresses those issues of Annex I WFD relevant on the basin-wide scale, i.e. information concerning the

1. Name and address of the competent authorities
2. Geographical coverage of the Danube river basin district, and
6. International relationships.
Part B – National report

The national report gives all relevant further information on the national level as well as information coordinated on the bilateral level. It addresses all issues listed in Annex I WFD. Regarding points 1., 2. and 6. the national information is given in addition to the information in Part A.

The information needed to fulfil the requirements of Art. 3(8) and Annex I WFD will be covered in Part A (roof report) and Part B (national reports) as follows:

<table>
<thead>
<tr>
<th></th>
<th>Part A Roof report</th>
<th>Part B National reports</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Name and address of the competent authorities</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>2. Geographical coverage of the river basin district</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>3. Legal status of competent authority</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>4. Responsibilities</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>5. Membership</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>6. International relationships</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

2 COMPETENT AUTHORITY

On the governmental level, according to the Law on Structure and Responsibilities of Ministries and State Bodies, the Ministry of Agriculture, Forestry and Water Management - Directorate for Water Management is responsible for water management. Besides issues related to agriculture and forestry, the Ministry is responsible for administrative and other work related to: water management, water management system, monitoring and harmonisation of water management development with economy development, regulation and maintaining of rivers and other waters and protection from waters and ice, protection from erosion and torrents; irrigation and drainage, management and use of water estate, water protection and protection of the sea from land-based pollution, ensuring supply of water for water supply and industry, use of water power, planning and harmonisation of development and building of public water supply systems and public sewage systems of national importance, inspection of water protection, water use and protection from water.

Before the December 2003 elections, the responsible body for water management was the State Water Directorate, which has now become part of the new Ministry of Agriculture, Forestry and Water Management.

NAME AND ADDRESS OF COMPETENT AUTHORITY:
Ministry of Agriculture, Forestry and Water Management
Ulica grada Vukovara 220, 10000 Zagreb
Croatia
3 GEOGRAPHICAL COVERAGE OF THE DANUBE RIVER BASIN DISTRICT

The territory of the Republic Croatia is divided into two river basins: the Danube River Basin and the Adriatic Basin. The total area of the Republic of Croatia is 56,538 km², of which 35,131 km² belongs to the Danube River Basin and 21,407 km² to the Adriatic Basin. The border between the basins runs through the mountainous area of the Republic of Croatia and was defined by taking into consideration hydrological boundaries. Figure 1 shows the geographical coverage of the Croatian part of the Danube River Basin.

The water basins districts in the Danube basin are:
1. Water basin district of the Sava river catchment area
2. Water basin district of the Drava and Danube catchment area

Table 1 shows the basic characteristics of major rivers.

<table>
<thead>
<tr>
<th>RIVER</th>
<th>SIZE OF CATCHMENT km²</th>
<th>LENGTH km</th>
<th>STATE BORDER km</th>
<th>AVERAGE DISCHARGE IN HR m³/sec</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOTAL</td>
<td>IN HR</td>
<td>TOTAL</td>
<td>IN HR</td>
<td></td>
</tr>
<tr>
<td><strong>SAVA RIVER CATCHMENT AREA</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sava</td>
<td>95,419</td>
<td>25,374</td>
<td>946</td>
<td>510</td>
</tr>
<tr>
<td>Sutla</td>
<td>909</td>
<td>133</td>
<td>92</td>
<td>89</td>
</tr>
<tr>
<td>Krapina</td>
<td>1,244</td>
<td>1,244</td>
<td>65</td>
<td>65</td>
</tr>
<tr>
<td>Cesma</td>
<td>2,890</td>
<td>2,890</td>
<td>96</td>
<td>96</td>
</tr>
<tr>
<td>Ilova Pakra</td>
<td>1,816</td>
<td>1,816</td>
<td>96</td>
<td>96</td>
</tr>
<tr>
<td>Orjava</td>
<td>1,616</td>
<td>1,616</td>
<td>97</td>
<td>97</td>
</tr>
<tr>
<td>Bosut</td>
<td>2,913</td>
<td>2,375</td>
<td>132</td>
<td>81</td>
</tr>
<tr>
<td>Kupa</td>
<td>10,236</td>
<td>8,412</td>
<td>294</td>
<td>294</td>
</tr>
<tr>
<td>Dobra</td>
<td>1,354</td>
<td>1,354</td>
<td>104</td>
<td>104</td>
</tr>
<tr>
<td>Korana</td>
<td>2,297</td>
<td>2,049</td>
<td>134</td>
<td>134</td>
</tr>
<tr>
<td>Mreznica</td>
<td>980</td>
<td>980</td>
<td>63</td>
<td>63</td>
</tr>
<tr>
<td>Glina</td>
<td>1,418</td>
<td>967</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Sunja</td>
<td>482</td>
<td>482</td>
<td>77</td>
<td>77</td>
</tr>
<tr>
<td>Una</td>
<td>9,368</td>
<td>1,686</td>
<td>212</td>
<td>129</td>
</tr>
<tr>
<td><strong>DUNAV</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vuka</td>
<td>1,260</td>
<td>1,260</td>
<td>126</td>
<td>126</td>
</tr>
<tr>
<td><strong>DRAVA AND DANUBE CATCHMENT AREAS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vuka</td>
<td>1,260</td>
<td>1,260</td>
<td>126</td>
<td>126</td>
</tr>
<tr>
<td>Mura</td>
<td>14,149</td>
<td>473</td>
<td>493</td>
<td>83</td>
</tr>
<tr>
<td>Karasica-Vucica</td>
<td>2,347</td>
<td>2,347</td>
<td>150</td>
<td>150</td>
</tr>
</tbody>
</table>
4 INTERNATIONAL RELATIONSHIPS TO ENSURE COORDINATION

4.1 General overview

The Republic of Croatia is a Central European and Mediterranean country located between Italy and Slovenia in the west, Hungary in the north and Serbia and Montenegro and Bosnia and Herzegovina in the east. The state inland border is 2,028 km long, with its major part passing alongside border rivers. The Adriatic Sea forms the south and southwest border. Croatia’s geographical position itself implies the necessity of cooperation with the neighbouring countries and wider international community in the field of water management.

The Republic of Croatia ratified the following international conventions and agreements related to water management:

- Convention on the protection and use of transboundary watercourses and international lakes (Helsinki, March 1992),

- Convention on cooperation for the protection and sustainable use of the Danube river (Sofia, June 1994),

- Convention for the protection of the Mediterranean Sea against pollution (Barcelona, February 1976) and Protocol for the protection of the Mediterranean Sea against pollution from land-based sources (Athens, May 1980),

- Framework Agreement on the Sava River Basin (Kranjska Gora, December 2002)

Other forms of international cooperation with international institutions are as follows:

- Croatian committee for international hydrological program and operational hydrological program (IHP/OHP UNESCO/WMO)
- Stability Pact and the SECI
- JICA- Japanese agency for international cooperation
- Cooperation with Bavaria in the field of water management in the framework of Croatian-Bavarian commission
- MoU between the Republic of Croatia and the Netherlands in the field of integrated water management
- DABLAS – Task force, EU program for reduction of pollution in the Black Sea basin
- Adriatic-Ionian initiative – cooperation between Croatia, Italy and Slovenia on the protection of the Adriatic Sea from pollution

4.2 Coordination of WFD implementation at the basin-wide level

The Danube River Protection Convention (DRPC) forms the overall legal instrument for cooperation and transboundary water management in the Danube River Basin. The International Commission for the Protection of the Danube River forms the platform for coordination.
4.3 Bilateral and multilateral cooperation

The Government of the Republic of Croatia signed the following bilateral agreements in the field of water management with the neighbouring countries:


According to this agreement, under the Croatian-Hungarian commission for water management four subcommissions were established:

-Subcommission for the Danube and Drava basin
-Subcommission for the Mura basin
-Subcommission for water quality protection
-Subcommission for multipurpose use and protection of the Drava and Mura rivers

The field of application of the agreement is the qualitative and quantitative protection of surface water resources, the qualitative and quantitative protection of groundwater, water supply, hydropower generation, irrigation, fishery, regulation and navigation.


According to this agreement, under the Croatian-Slovenian commission for water management four subcommissions were established:

-Subcommission for the Danube and Mura basin
-Subcommission for the Sutla, Sava and Kupa basins
-Subcommission for the water basin of the Littoral and Istrian catchment areas and coastal waters
-Subcommission for water quality

The field of application of the agreement is the qualitative and quantitative protection of surface water resources, the qualitative and quantitative protection of groundwater, water supply, hydropower generation, irrigation, fishery and regulating.


The field of application of the agreement is the qualitative and quantitative protection of surface water resources, the qualitative and quantitative protection of groundwater, water supply, hydropower generation, irrigation, fishery, regulation and navigation. The river basins covered by the agreement are: the Sava and Una (Danube River Basin), the Neretva and the Malo Ston Bay, the Trebizat and the karst area (Adriatic Sea).

At present the Republic Croatia does not have a bilateral agreement with Serbia and Montenegro.

-International Framework Agreement on the Sava River Basin

Bosnia and Herzegovina, the Republic of Croatia, Serbia and Montenegro and the Republic of Slovenia signed on 3 December 2002 in Kranjska Gora the Framework Agreement on the Sava River Basin, including its annexes and Protocol on the navigation regime. The field of application of the agreement is sustainable water management and navigation. So far the Agreement has been ratified by Croatia, Bosnia and Herzegovina and Serbia and Montenegro.
Six months after the ratification of the Agreement by all four countries, the Sava Commission will be established. In the meantime, the Interim Sava Commission was established and has been working on the preparation of necessary documents for starting up of the Sava Commission and on the coordination of ongoing transboundary projects in the Sava River Basin.
5 LIST OF ACRONYMS

DRB – Danube river basin
DRBD – Danube river basin district
DRBMP – Danube river basin management plan
DRPC – Danube river protection convention
EU – European Union
HR – Croatia
GEF – Global Environment Facility
ICPBS – International Commission for the Protection of the Black Sea
ICPDR – International Commission for the Protection of the Danube River
MoU – Memorandum of Understanding
UNDP – United Nations Development Programme
WFD – Water Framework Directive