

# 1. MANAGEMENT AND ADMINISTRATION OF WATER RESOURCES IN POLAND

## 1.1 LEGAL REGULATIONS

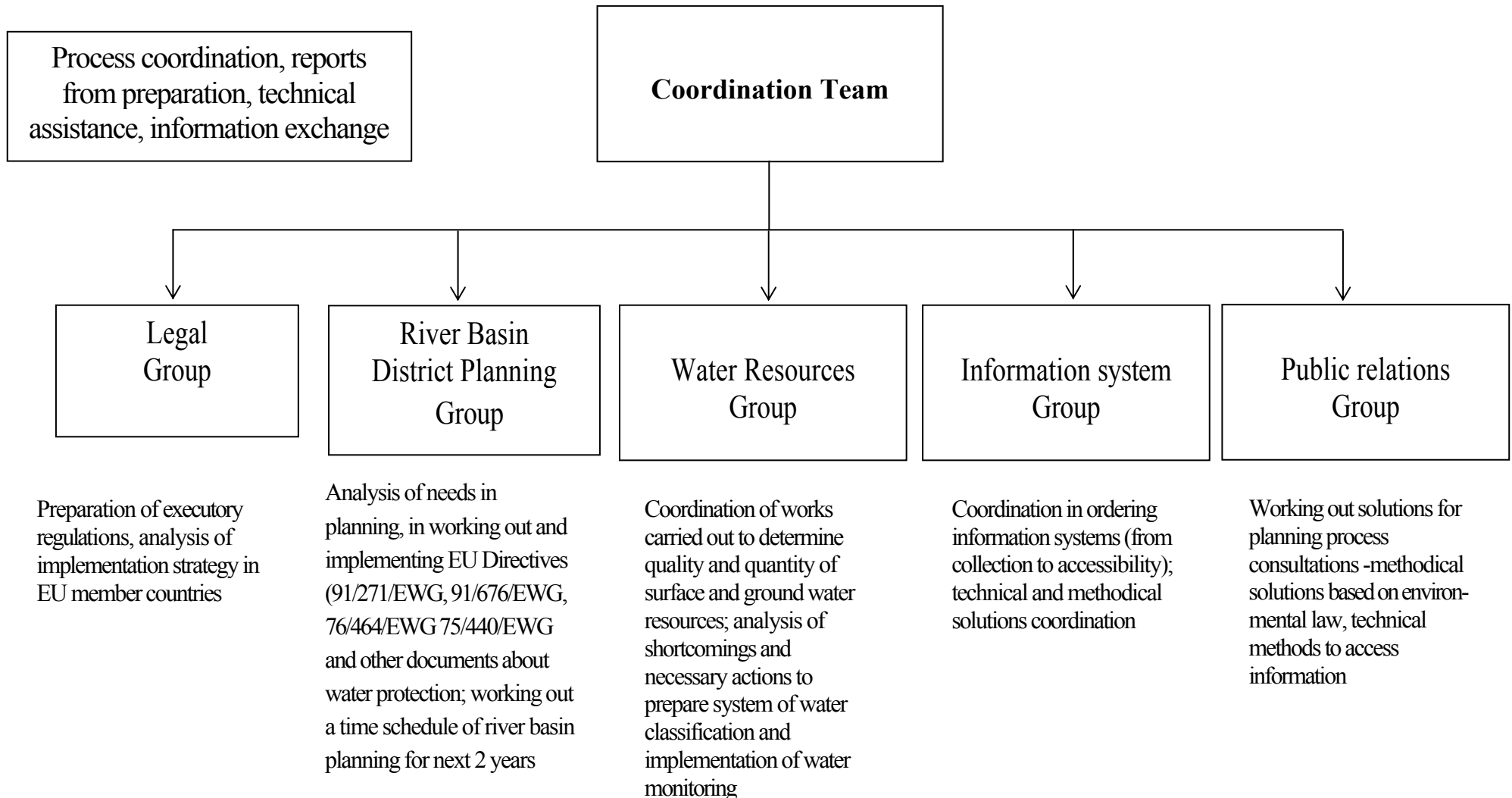
Rational utilisation and protection of water resources is sanctioned by the Constitution of the Republic of Poland: “The Republic of Poland shall guard the independence and the inviolability of its territory, secure the human and civil freedom and rights, the public safety, the national heritage, and shall secure the environmental protection following the principle of sustainable development”.

The most important legal regulations in compliance with this entry are legal standards specifying:

- The utilisation principles of water resources  
*[Act dated 18<sup>th</sup> July, 2001 - Water Law, Act on Collective Water Supply and Collective Wastewater Pipeing Off dated 7<sup>th</sup> June, 2001 ];*
- The use of environment  
*[Act dated 27<sup>th</sup> April, 2001 -Environmental Protection Law , Act on Environment Inspection dated 20<sup>th</sup> July, 1991; Act on Nature Protection dated 16<sup>th</sup> October, 1991];*
- Problems related to town and country planning  
*[Act on Land Development dated 7<sup>th</sup> July, 1994];*
- The tasks performed by the local governments and the state agencies  
*[Act on Government Administrative Departments dated 4<sup>th</sup> September, 1997; Act on Government Administration in Voivodship dated 5<sup>th</sup> June, 1998; Act on Changes of Acts Dealing with Assignment of Competence of Public Administration Bodies Due to Polish Administration System Reform dated 24<sup>th</sup> July, 1998].*

The new Water Law establishes, on the basis of the existing structure of administration, a two-level central administration dealing with water management: National Board of Water Management and seven (7) Regional Water Management Boards. The bill implements new strategy in water resources management: planing at different levels: national plans and regional plans, and if needed conditions of water resources use in specific catchments. Plans will deal with: protection against flood and drought, improving the state of water resources, protection against agricilutural nitrate pollutions (so-called porgrammes). National plans are to be prepared by the President of NBWM, regional plans are to be prepared by directors of RWMB. Arrangements included in these regional plans will be directly implemented in local land development plans, prepared by communes authorities.

# Organisation of implementation of the Water Framework Directive 2000/60/WE in Poland



## **1.2 COMPETENCES OF THE CENTRAL AND LOCAL GOVERNMENT ADMINISTRATIVE ORGANS**

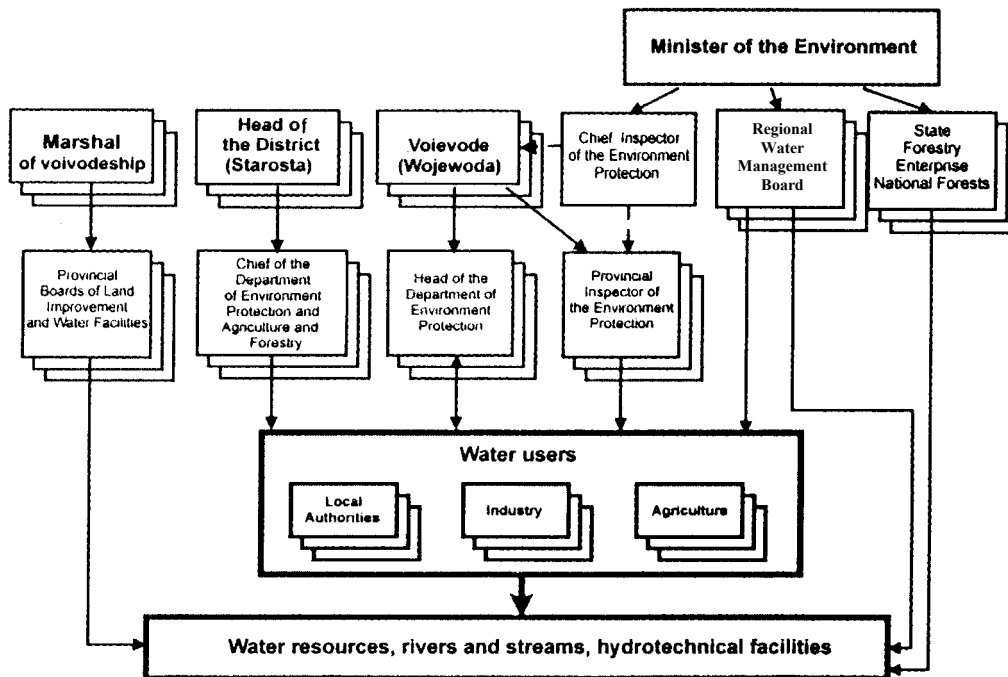
The main administrative organ dealing with water management is the Minister of the Environment, responsible for rational water policy in the country. His most important tasks in this field comprise:

- Shaping the state's policy by proposing proper laws, intended, among others, at the creation of legal and economic instruments serving the rational use and protection of the quality of water resources;
- Agreeing with the president of NBWM national plans of water management and of counteracting flood and drought effects,
- Supervising the subordinate units.

The most important institutions responsible for the management of water resources in the hydrographic areas are the Regional Boards of Water Management [RZGW]. The RZGW is a regional non-affiliated governmental administration unit that executes tasks issued by the Minister of the Environment in water management field as well as those related to conservation of the state-owned waters and to the implementation of water management investments of global significance.

In February 2000, the Minister of the Environment established the Office of Water Management. The activity of the Office is aimed at harmonising the operation of the RZGW and providing assistance in organising actions focused at the rational use, preservation and protection of water resources.

The administration of the state-owned surface waters, being beyond the RZGW's administration are divided between the marshal of the voivodship and the director of national park (waters located within park territory).



*A diagram of links among the organisations and institutions of water management in Poland.*

The management system of water resources comprises both the central and local government administrative bodies. The planning, executive and investment tasks are subject to the local governments of all levels – of the voivodeship, county and commune. There are following instruments that enable performing those tasks: strategies of voivodeship development, voivodeship programmes of sustainable development and environmental protection, and principally, the local plans worked-out by the communes.

The management tasks, regulating the legal status of the use of water resources are carried out by the governmental units – the Voivodeships as well as by the heads of County (as tasks assigned by the Central Government).

The supervision over compliance with the regulations and the environment monitoring is carried out by the Chief Inspector of Environmental Protection. At the voivodeship level, the tasks of the Environment Inspection are performed by the voivode through the Voivodeship Inspector of the Environmental Protection. The Voivodeship Inspector deals with the proceedings brought up against any industrial plant, that is hazardous to health or life and/or causing other damage, and imposes restrictions and/or fines for unlegal practicies (as specified in repective laws).

### **1.3 ECONOMIC INSTRUMENTS**

The economic instruments supplying the implementation of the state policy in the field of management of water resources comprise:

- Fees for the use of the environment; the water management regulations provide charges for water intake and sewage discharges into water or into the soil (so-called special water use purposes);
- Fines and/or financial penalties for misuse of the environment, among others for illegal water intake and exceeding the permissible water lifting as well as infringement of limit values specified for sewage discharged;
- Subventions government and budget grants and preferential loans from the national, voivodeship, county and community funds for the environmental protection and water management, the Environmental Protection Bank and the foundations supporting the environmental investments;
- Tax reliefs – pro-ecological fiscal preferences are mainly the possibilities of deducting some investment expenses and donation for the environmental protection and the application of reduced VAT-rates for manufacturers of certain goods and those who render ecological protection services.

### **FUNDS FOR ENVIRONMENTAL PROTECTION AND WATER MANAGEMENT**

The financial means obtained from fees and charges and from financial penalties for the misuse of the environment are transferred to Funds for the Environmental Protection and Water Management (FEPWM): one national, 16 voivodeship, 373 county and 2489 community. For example, the means coming from special water use fees and financial penalties are transferred as follows:

- National FEPWM - 35% from 70% of all,
- Voivodeship FEPWM - 65% from 70% of all,
- County FEPWM - 10% of all,
- Community FEPWM - 20% of all.

The means collected in the funds are apportioned for giving financial assistance to the investments serving the environmental protection and water management purposes.

## **STATE BUDGET GRANTS**

The State budget allows for the outlays on multi-year investments (as far as water management is concerned, those are mainly large retention reservoirs). The budgetary means also support the maintenance of the rivers and hydro engineering facilities within the financial aid to the RZGW and the Voivodeship Boards of Land Reclamation and Water Structures. The use of indirect budgetary means, like general grants and purpose subventions for the local governments is also significant; e.g. in the years 1998-2000, communities, county, and voivodeships could obtain purpose subventions for additional financing of their own tasks in relation to the restoration of the 1997 flood damage.

## **THE ENVIRONMENTAL PROTECTION BANK**

The Environmental Protection Bank (BOS — Bank Ochrony Środowiska S.A.) has been operating since 1991. It offers preferential loans for the environmental protection and water management. The preferential loan pool was established at the BOS i.a. in cooperation with the National and Voivodeship Funds for Environmental Protection and Water Management.

## **FOUNDATIONS**

There are some foundations that support financing of the investments in water management: the Rural Areas Aid Foundation, Polish Agency for Regional Development, European Fund for the Development of Polish Rural Areas “Counterpart Fund”, Foundation of Aid Programs for Agriculture. Those foundations collect financial means and re-distribute foreign aid. They give preferential loans and grants to the companies operating in the sector of water and sewage disposal and to the community boards, intended for the investments in sewage disposal and sewage treatment.

## **FOREIGN SUPPORT**

Poland receives financial support for carrying out projects in the field of water management under bilateral cooperation agreements or through international organisations [e.g. International Monetary Fund, the World Bank Group or European Communities]. Currently, the projects in the field of water protection and water management are partly financed from the aid programs like: PHARE 2000, SAPARD and ISPA.

Since 1991 it has been, possible to finance the environmental protection under the clauses of partial reduction of the Polish debt. The eco-conversion funds are administered by Eko-Fund.

except for the Vistula Lagoon, the river waters leave our territory and continue their flow in these neighbouring countries.

According to the inter-government agreements or conventions, the organization of co-operation between Poland and its neighbours on the transboundary waters is arranged by the “Plenipotentiary of the Government of the Republic of Poland for Water Management on Transboundary Water Regions”, entrusted by the coordination of the activity of the “joint commissions border waters”. Under this co-operation scheme there are appointed working groups for solving both emergency matters and items entailing permanent co-operation.

The range and nature of co-operation on the frontier waters are different within the respective stretches of the borderline. The most serious problems occur on the waters at the frontier with the Federal Republic of Germany and in the south [with the Czech Republic and the Republic of Slovakia].

As far as the frontier zones with Ukraine, Belarus, the Republic of Lithuania and the Russian Federation are concerned, the quality monitoring of the frontier waters is carried out. Additionally, some incidental individual issues are considered, for example, the construction of treatment plants at the present and planned border crossings [Ukraine], protection and maintenance of water resources of the Vistula Lagoon [Russian Federation].



## **2. PRESENT ADMINISTRATIVE STRUCTURES RELATED TO WATER QUALITY PLANNING**

The administration of Polish environmental and adjacent legislation is distributed between four levels: the State, voivodeships, counties and municipalities. The State is controlled by the parliament. The heads of voivodeships - voivodes are chosen by the government. On the other side there is a local democratic self-governing authority responsible for the policy of the voivodeships. There are county councils at the level of county and there are also municipality councils. At each level there is a branch department responsible for the environmental policy. However, county is the first level for issuing decisions concerning the water intake or sewage discharge. The Ministry of Environment prepares regulations and acts approved by the parliament. The way of appeal is stated in the Code of Administration Act.

*The Water Law Act* of 2001 (with amendments) is the most important one, it gives basic regulations concerning requirements that the user of water should comply with. This act precise so-called especial use of water that requires the permission. The act also states that water management is based on shaping, protection and exploitation of ground and surface waters according to a rule of sustainable development and especially on:

- 1) protection of ground and surface water resources against pollution and over exploitation,
- 2) protection against floods and droughts,
- 3) exploitation of water for the sailing and energy purposes,
- 4) providing people and water management facilities with proper quality water,
- 5) fulfill the needs of people concerning health, hygiene and recreation

The instruments of water management are:

- 1) water management plans on national and regional level,
- 2) conditions of water use in the catchment
- 3) water-law permissions,
- 4) payments for water use and exploitation of water facilities,
- 5) water management cadastre.

*II Ecological policy of the State* - a document accepted by the Ministry Council and Polish Parliament in December 2002. The document states prior aims of short, medium and long term. There are following aims of the ecological policy:

- 1) improvement of environment state,

- 2) ensuring an access to information on environment for public and its participation in decision making process ,
- 3) limitation of consumption of natural resources by pro-ecological educational means,
- 4) shaping macroeconomical and sectoral policies to be conducive to country development according to sustainable model.

The aims and rules are in accordance with EU policy concerning environmental protection stated in the article 130 R of the Rome Treaty of the 1 July 1987.

In connection with the previous (first) *State ecological policy* (for years 1991 to 2000) there was started the **Ecological Policy Execution Program for the year 2000**. There were stated basic aims concerning the protection of water resources. Most important ones were enforcement and acceleration of the pollution decrease tendency of waters entering the Baltic Sea. There was also a need to decrease fresh water deficit and increase protection of natural resources. All these aims were supposed to be achieved by:

- 1) construction of waste water treatment plants in the whole country (it is planned to build 1700 WWTP amounting to 4.5 million m<sup>3</sup>/d);
- 2) enforcement of monitoring and execution of the law, reforming the water management, extension of extraordinary environmental threats abatement system;
- 3) updating the system of fees and penalties for the use of environment;
- 4) harmonization of Polish legislation system with EU standards;
- 5) preferences for “cleaner production” strategy.

***Nature Protection Regulation*** of 1991 means preservation, proper exploitation and renew of resources and nature elements, especially wild plants and animals, nature complexes and ecosystems.

***Plant Protection Regulation*** of 1995 states that only no hazardous or harmful for human, animals nor environment products may be used.

***Small Retention Programme*** - started in the early 90-ies and aiming at restoration of forgotten small water reservoirs and building new systems of water retention. 11<sup>th</sup> April 2002 the agreement between Ministry of Environment, National Fund for Environmental Protection and Water Management and Agency of Modernisation and Restructuring of Agriculture on co-operation in increasing small retention development and in spreading and implementation of ecological water retention means.

## 2.1 DIFFERENT IMPACTS ON WATER QUALITY

### *Agriculture*

Farms with 500 of Big Calculation Units are treated as especially harmful to the environment. In order to manage such a big farm an EIA procedure is needed. This is limited by the Environmental Protection Law. According to the new Water Law, in regions where water are sensitive to agricultural origin nitrates a special protection programmes have to be work out by the director of specific RWMB. In the frame of international cooperation Best Agriculture Practices (BAP) are implemented.

### *Industrial emissions*

Approval and control of water consumption and sewage discharge is provided by the voivodeship and county administration. The voivodeship administration is responsible for giving decisions to the enterprises listed in the executive regulation on Environmental Protection. The counties issue decisions to all the other enterprises. Since 1997 Regional Boards of Water Management (only 7 in Poland) serve with their assist and knowledge in the procedure of issuing decisions. It is obvious that not every enterprise needs its own permission for water intake or discharge of sewage due to the fact they are connected to the municipal water supply and sewage systems. However, while discharging sewage into the municipal system there is prepared an agreement with the operator of the sewage system concerning the quality of sewage. Sometimes the enterprise has to pre-process its effluents.

### *Emissions from large waste water treatment plants*

The wastewater treatment plants above 150 000 PE are approved by the voivodeship administration and others by the counties. The treatment plants are controlled mostly by Voivodeship Inspectorates of Environmental Protection that lays penalties for exceeding standards stated in the permission. The typical requirements for the quality of effluents from municipal waste water treatment plants with discharge below 2000 m<sup>3</sup>/d:

Water body	BOD <sub>5</sub>	SS	N <sub>Tot</sub>	N <sub>NH4</sub>	P <sub>Tot</sub>
	mg/l				
Lake	15	25	30	6	1.0
River	30	50	30	6	5.0
Coastal water	30	50	30	6	5.0

and wwtp with discharge higher than 2000 m<sup>3</sup>/d (since 1 January 2000):

Water body	BOD <sub>5</sub>	SS	N <sub>Tot</sub>	N <sub>NH4</sub>	P <sub>Tot</sub>
	mg/l				
Lake	15	25	30	6	1.0
River	15	50	30	6	1.5
Coastal water	15	50	30	6	1.5

However, there are two more restrictions concerning effluents from WWTP. The average quantity of the effluent per day cannot exceed 10 % of the Average Low Flow (ALF) in the river or while the ALF is below 1.5 m<sup>3</sup>/s and the total discharge of effluents per day on a distance of 10 km is higher than 10 % of ALF.

#### ***Emissions from households in rural areas***

In the recent years there was begun a process of installing small wastewater treatment facilities for single households. Most of farms have no such facilities or are equipped by accumulating septic tanks.

#### ***Enforcement***

If the requirements of any decision are not obeyed then the voivodeship or county authority may withdraw such permission. Then the polluter has to pay a few times higher fees than normal ones. If the user exceeds the requirements occasionally then the Voivodeship Inspectorate of Environmental Protection is in force of making appropriate analysis and setting penalties upon the polluter.

### **3. DATA BASES OF WATER QUALITY PLANNING**

The state environmental monitoring is financed by the State budget and enforced by target funds. It is coordinated by the Chief Inspector of Environmental Protection - CIEP. There are following types of monitoring networks:

- national,
- regional,
- local.

***The national network*** is responsible for monitoring of pollution in border regions, maintenance of early warning stations, making analysis for the needs of international projects and cooperation agreements (e.g. HELCOM, EMEP), controlling specific Polish ecosystems. All the locations of

monitoring points and sampling programs are approved by CIEP. The national monitoring is carried out at least 24 times a year. There are analyses made of 51 physical, chemical and bacteriological parameters.

***The regional network*** is set up for monitoring of pollution in specific regions. It is strictly related with the Voivodeship Inspectorates of Environmental Protection (VIEP) area of activity. This part of monitoring network is mainly financed by the State budget but also by the Voivodeship Fund of Environmental Protection and Water Management and a voivodeship's budget. The national monitoring is carried out at least 12 times a year and cover analysis of about 15 parameters.

***The local networks*** serve as a source of information on the impact of industry on the environment. They are set up by enterprises that have a harmful influence on the environment and were forced by an administration decision to monitor changes. This type of monitoring is directly financed by an interested enterprise or the local authorities sometimes. The frequency and range of parameters depends on local needs.

Polish standards of surface water quality are specified in classification based on water use purposes, namely:

Class I – water for population supply, some industries and salmon fish farming purposes,

Class II – water for fish farming, domestic animal, and recreational purposes,

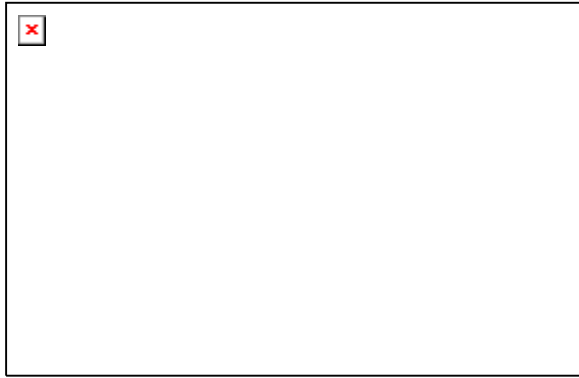
Class III - water for industry and irrigation purposes.

### ***Streams and rivers***

They are monitored according to above mentioned rules.

### ***Lakes***

Only 15 lakes in whole Poland - included into a national network - are monitored every year. The national network provides information on about 20 physical and chemical parameters and on 2-4 biological ones. Other lakes above 100 ha included in the regional network are usually monitored twice a year (spring and autumn) every 5 or 6 years.



*Drużno Lake (Photo: Piotr Kowalski).*



*Intermoraine lake (Photo: Janusz Topilko).*

### ***Coastal waters***



*Krynica Morska in the Vistula Peninsula  
(left side Baltic Sea, right side Vistula Lagoon)  
(Photo: Krzysztof Wolski).*

The Baltic Sea monitoring started in 1979 at three open sea monitoring points controlled 6 times per year. Since 1998 there was started the COMBINE program concerning the coastal zone including lagoons. According to the international agreement the samples are taken from 6 to 10 times a year from each monitoring point. There were set up 10 monitoring points in the Vistula Lagoon. Four of them are along the borderline.

## **4. POLISH ERB AREA**

### **4.1 SITUATION OF TODAY**

The Baltic is one of the largest seas of brackish waters [marine salinity index about 7,5%]. Its area is 415 000 km<sup>2</sup>, the average depth is 55 m (max 459 m) and estimated volume of 20 000 km<sup>3</sup>. In case of the Baltic Sea, of the industrial activity in its densely populated catchment areas as well as rare water exchange process with the North Sea is key importance.

In the last century, the Baltic Sea has been transformed from an oligotrophic water region into an eutrophic reservoir with high concentrations of biogenic agents. It is manifested by excessive amounts of algae, increased primary production, oxygen shortage at deep water levels, and very serious changes in the bottom biocenosis.

**The Helsinki Convention of 1974.** On the initiative of Finland the Convention on the Protection of the Marine Environment of the Baltic Sea, called “The 1974 Helsinki Convention” was signed on 22<sup>nd</sup> March 1974. It resulted from great concern about the hydrologic and ecological features of the Baltic Sea as well as the sensitivity of its live resources together with the changes occurring in the marine habitat. The Convention, effective since 3 May 1980, allowed monitoring and supervising the pollution caused by ships, dumping of wastes by land sources, in consequence of research and explorative activities on the sea bottom, or due to emergency and disastrous spillages.

The fundamental principles and obligations are given in art. 3 providing that the states shall either individually or collectively take up legal, administrative and other steps aimed at preventing and reducing the pollution as well as at protecting the natural environment of the Baltic Sea.

**The Conference of Prime Ministers of the Baltic Region, Ronneby, Sweden, 1990.**

At the Ronneby Conference, held on 3<sup>rd</sup> September 1990, member countries signed the Declaration on the Baltic Sea. At the Conference was also appointed the High Level Task Group that had to prepare a joint program of actions aimed at protecting the marine environment of the Baltic Sea. At the same time, there were commenced works on the revision of the Helsinki Convention as well as negotiations on establishing the International Commission for Protecting the Oder River from Pollution.

**The “New” 1992 Helsinki Convention.** At the Diplomatic Conference, held on the 8 and 9<sup>th</sup> April 1992, in Helsinki, the Ministers of the Environment of 9 states – Denmark, Estonia, Finland, Lithuania, Latvia, Germany, Poland, Russia and Sweden, signed the “New” Helsinki Convention. Its provisions are based upon the 1974 Helsinki Convention and reflect the ideas of both the 1990 Baltic Sea Declaration and of the 1992 Rio Declaration. The “New” Convention concerned the inland waters. In a complex way it regulates the actions aimed at protecting the marine environment, in view of the problems pertinent to the protection of waters, surface and landscape amenities.

**The 1992 Declaration on Protection of the Natural Environment of the Baltic Sea and the 1992 Joint Baltic Programme.** The works on the revision of the Helsinki Convention were being accompanied by those aimed at preparing a Joint Programme for the Baltic Sea. In the Baltic Sea Programme, completed in 1992, there were defined 132 objects and areas [hot spots] causing most environmental nuisance. The performance of the Baltic Programme has been planned for 20 years and its costs were estimated at 18 billion ECU.

**The International Committee for Protecting the Oder River from Pollution.** The agreement concerning the International Committee for Protecting the Oder River from Pollution was signed on 11<sup>th</sup> April 1996. It became effective on 28<sup>th</sup> April 1999. Its signatories are the governments of Poland, the Czech Republic and the European Commission. The objectives of this Convention are given in Article 1:

- Prevention and permanent reduction of pollution of the Oder River and the Baltic Sea caused by noxious compounds.
- Bringing the water and relative shore ecosystems as close as possible to the natural ones, securing proper diversification of species.
- Enabling the Oder River to be utilised mainly for winning potable water from infiltration bank intakes, utilization of its waters and deposits in agriculture.

#### **4.1.1 CO-OPERATION ON THE TRANSBOUNDARY WATERS**

Due to the country's geographical position of Poland a considerable of its borderline runs along waters, mainly rivers.

To large extent, Poland "uses up" the effects of waters utilisation in the neighbouring states. Only along the boundary with the Lithuanian Republic and the Russian Federation, save the Vistula Lagoon, the river waters leave our territory and continue their flow in these neighbouring countries.

According to the inter-government agreements or conventions, the organization of co-operation between Poland and its neighbours on the boundary waters is arranged by the "Plenipotentiary of the Government of the Republic of Poland for Water Management on Frontier Water Regions", entrusted by the coordination of the activity of the "joint commissions for frontier waters". Under this co-operation scheme there are appointed working groups for solving both emergency matters and items entailing permanent co-operation.

The range and nature of co-operation on the frontier waters are different within the respective stretches of the borderline. The most serious problems occur on the waters at the frontier with the Federal Republic of Germany and in the south [with the Czech Republic and the Republic of Slovakia].

As far as the frontier zones with Ukraine, Belarus, the Republic of Lithuania and the Russian Federation are concerned, the quality monitoring of the frontier waters is carried out. Additionally, some incidental individual issues are considered, for example, the construction of

treatment plants at the present and planned border crossings [Ukraine], protection and maintenance of water resources of the Vistula Lagoon [Russian Federation].

The growing co-operation on the frontier waters with the Germany reveals more and more legal, technical, organisational and financial problems.

There are also legal and economic problems on the southern frontier. For example, one should mention the problems pertinent to the planned Raciborz reservoir, lack of any considerable improvement in quality of the Oder River waters along the border with the Czech Republic or the Small Water Power Plant on the Poprad River at Sulina on the Slovak border. The affect of co-operation with Ukraine was, among others, signing the Agreement on co-operation in water management on the frontier waters [1996]. This agreement became effective in 1999.

Co-operation with the remaining eastern partners [Belarus, Lithuania and Russian Federation] mainly consists of taking and solving individual cases and matters.

## **4.2 REGIONAL WATER QUALITY PLANNING**

The process of physical planning is regulated in the Act of 1994 on Spatial Management. This act gives general description and guidelines for planning. It is assumed that the sustainable development is the basis factor while considering possibilities of new arrangements. This document also states rules for solving conflicts between the involved sides. It is especially considered that spatial and architecture arrangement should be maintained; architecture and landscape features, environmental protection, health and security of people and their estates preserved. The municipalities are responsible for the physical planning at their territory except from interior marine waters and sea territory. Self-governing authority of a voivodeship is responsible for creating and coordinating regional physical planning. The Ministry Council and their agencies are responsible for the state physical planning and coordination of development strategies.

In order to precise the local spatial policy the municipality council is calling for the elaboration of a study on conditions and directions of spatial planning. The municipality board elaborates such a study regarding the voivodeship's plan and then asks for opinions of appropriate participants and presents it to the public. The study should be also opinioned by an appropriate regional board of water management concerning surface and ground water. The plan should be compliant with the catchment management conditions.

If there is no response for three weeks, it is assumed that the side has no negative remarks. Then the board considers all contrary opinions within a month and the final decision are made during a meeting of the municipality council. The municipality council on the basis of the study may prepare a local regulation in form of spatial plan. The plan should have an attached opinion of an expert enrolled in the ministry's list of experts. The opinion should state the results of impact of the plan on the environment, i.e. an Environmental Impact Assessment.

New Water Law forces regulations which imply changes in local spatial land use plans according to water resources management and protection plans and programmes prepared by directors of RWMBs. In other words, all the rules and limitations expressed in those plans and/or programmes have to be directly implemented in local spatial plan.

#### **4.3 FUTURE ENVIRONMENTAL OBJECTIVES**

We will use the example of the City of Gdansk to present water management policy of the Polish cities. The ecological policy defined in the City Council Resolution was implemented in the 90s. In the medium-term priorities of the policy a necessity to eliminate one of the 'hot-spots' in the Baltic area by modernization and development of the "Wschod" waste water treatment plant was stressed.

In 1998 the strategy of sustainable development of the city was prepared and approved.

In 2002 the City Council adopted the "Environmental protection program till 2010" which is the sector operation program for implementation of the targets included in the strategy.

The program was prepared on the base of the experts' elaborations and conclusions from the Forum Local Agenda 21 meetings.

The short-term priority of the program is to achieve the quality of the infrastructure complying to the level of the well developed cities in the EU.

The targets and indicators of their achievement have been defined in the program.

The examples regarding water management are the following:

- 100% of sewage biologically treated, complying to the Baltic Sea quality standards, 97% of buildings connected to the sewer system
- 99% of buildings supplied with water from the municipal water distribution system
- increase of retention tanks to separate basins including the presentation of the increased level of this capacity

The short-term priority is to achieve the quality of the environment as required by the UE regulations.

The program includes the time-table and costs of the implementation of the targets.

The implementation of the program and results of its implementation are monitored. As for the water management the monitoring includes: control of ground water, rivers and lakes – measurement of pollution load.

### **Water protection in the Polish state policy**

The second ecological policy elaborated by Ministry of Environment was adopted by the Ministers Council on 13 June 2000. This policy is forming the part of National Development Program (NPR) – chapter concerning the protection of the environment. The detailed tasks and activities to be taken within the ecological policy are defined in the Long-term strategy of sustainable development – Poland 2025.

In the II Ecological Policy it has been stated that the ecological safety of society and economy requires such a quantity of water which would be sufficient to meet the quantity and quality needs.

Considering the reasonable use of natural resources, reasonable use of water in industry, economy and agriculture have been noticed.

In protection of environmental quality, referring to water management, there are remarks concerning preservation of surface and ground water as well as protection of the Baltic sea.

It is recommended to eliminate pollution at sources, it is necessary to introduce some changes in water management enabling supply in ground water for citizens and use of surface water for industrial purposes. It is also necessary to preserve waters against eutrophization, especially the waters of the Gdansk Bay and Vistula Lagoon.

One of the short-term priorities was to eliminate “hot spots” in the Baltic sea mentioned in the HELCOM documents.

In the short-term period (2003-2010) activities will be carried out in order to eliminate the untreated sewage discharge from cities and industry, 50 % reduction of pollution load discharge into the surface water, 30 % reduction of surface flow comparing to the year 1990 in order to meet the EU surface water standards.

The chapter referring international co-operation includes co-operation of the Baltic states aiming at preservation of the sea against pollution, protection of fishes and bio-diversity as well as implementation of the common policy – preparation and introduction of Baltic Agenda 21.