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Water Protection Zones in the Istra Region

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The Russian-US Environmental Law Task Force was established in November 1994 by the US Environmental Protection Agency (USEPA) and the Center for International Environmental Law (CIEL) with the support of the US Agency for International Development (USAID) as part of the Environmental Policy and Technology Project.

The Task Force included Russian and US environmental lawyers acting as project consultants. During its existence, the Task Force has supported a number of the Environmental Policy and Technology Project's demonstration projects designed to protect water and air quality in various regions of the country.

This pamphlet is the result of the work of the Task Force under the Project "Watershed Management in the Istra River Basin." It focuses on the issues pertaining to the water protection zones of the Istra Region. Special legal recommendations are offered to farmers, holiday cottage owners, and to all whose land parcels are located within the boundaries of water protection zones.

In addition, these materials can be used by owners of those plots of land located in similar, specially protected areas in other regions. It is also designed for use by state officials, members of public environmental agencies, and a wide range of readers interested in environmental law issues.

Table of Contents

Introduction	1
Definitions	1
1. Water Protection Zones and Why We Should Protect Them	3
2. What Kind of River Do I Live, Work, and Vacation Near?	7
3. Activities in Water Protection Zones and Their Impact on Bodies of Water	9
4. Do's and Don'ts in a Water Protection Zone: Farmers, Holiday Cottage Owners, Businesspeople	15
5. Under Standing the Do's and Don'ts in a Water Protection Zone	19
6. The Role of the Local Administration in Protecting Water Protection Zones	22
7. Defending the Rights of the Individual	25
8. Getting Legal Advice	29
Attachments	
Decree of the Government of the Russian Federation dated November 23, 1996, No. 1404, Moscow, On confirmation of Regulation on water protection zones of water bodies and their riparian protective strips	32
Water Code of the Russian Federation (excerpts)	37

WATER PROTECTION ZONES IN THE ISTRA REGION

Introduction

The Rivers of the Istra region are not only an invaluable asset to their inhabitants, but they are also one of the main water supply sources for the city of Moscow. A significant portion (up to 10 percent) of drinking water for the Russian capital comes from the rivers and the lakes of this region. Thus, it is of vital importance to maintain their environmental cleanliness. However, as human economic activity expands, the negative impact on natural sites, specifically on surface water, increases. Therefore, the protection of water quality becomes one of the critical issues associated with sustainable environmental management. Establishing water protection zones along rivers, lakes, and other bodies of water is one of the basic measures in addressing this issue.

This pamphlet explains how a water protection zone is created, the types of prohibitions and restrictions involved in using natural resources in water protection zones, and the types of liabilities that arise from non-compliance with these requirements. The material contains updated environmental and legal information about this issue, legal recommendations specifically for farmers, holiday cottage owners, and other citizens, businesses, and agencies that have their plots of land located in a water protection zone, as well as information about agencies needed in the event that questions on environmental law arise. Generally, this publication may be of interest to any resident of the Istra region, to Muscovites who vacation here, and to all those who are concerned about the problems of natural resource conservation in the Moscow suburbs.

The attachment to the pamphlet includes the text of the Regulations for Water Protection Zones of Bodies of Water and Protective Shorelines Thereof, as well as a number of Articles of the Water Code of the

Russian Federation concerning procedures for using natural resources on the territory of water protection zones of bodies of water and protective shorelines.

Definitions

A Water protection zone is a territory that borders upon water areas of rivers, lakes, reservoirs, and other surface bodies of water. A special regime for economic and other operations are enforced in a water protection zone, in order to prevent pollution, contamination, siltation, and depletion of the bodies of water and to preserve critical habitats.

A *Protective shoreline* is part of the territory of a water protection zone, usually in the form of a narrow strip along the bank of a river or the shoreline of a lake, storage reservoir, or other surface bodies of water. Additional restrictions, with respect to nature management, are in force on a protective shoreline.

A Sanitary protection zone is a territory that adjoins bodies of water which are used to supply water for drinking and domestic purposes and which contains natural medical resources. A special regime for economic and other activities is enforced in a sanitary protection zone.

A *Body of water* is a concentration of waters on the surface of the land or in subsoil that has boundaries, volume, and features of a water regime. Surface bodies of water are one of the types of bodies of water.

Surface bodies of water represent a continuous or temporary concentration of water on the surface of the land that has boundaries, volume, and features of a water regime. They are subdivided into: surface streams and reservoirs (sometimes combined and referred to as surface water reservoirs).

A *Surface stream* is a surface body of water where water is continuously moving. Surface streams include rivers and reservoirs, small rivers, canals for inter-basin re-allocation and integrated utilization of water resources.

A Surface water reservoir is a surface body of water where waters are in a state of decelerated water exchange. Surface water reservoirs include lakes, reservoirs, swamps, and ponds.

A *Water area* is a water space limited by natural, artificial, or conventional boundaries.

A Basin of a surface body of water is a territory that includes catchment areas of water reservoirs and streams connected by hydrological means, of which a major one flows into a sea or lake.

A *Catchment area* is a territory that yields a body of water.

Body of water conservation is an activity designed to preserve and rehabilitate bodies of water.

Pollution (of bodies of water) occurs when a discharge, or delivery by some other means, and formation of a harmful substance deteriorates the quality of the surface and underground waters, thereby limiting the use of the bottom layer and the shores, adversely impacting bodies of water.

Contamination (of bodies of water) occurs when a discharge, or delivery by some other means, of objects or suspended particles are emitted, which deteriorate the quality of bodies of water and complicate their use.

Water depletion is a consistent decrease in stock resulting in deterioration of the quality of surface and underground waters.

Sewage water is the water discharged in an established manner into bodies of water after it has been used or discharged from contaminated areas.

1. Water Protection Zones and Why We Should Protect Them

A water protection zone is a territory that borders on rivers, lakes, and reservoirs where a special regime for economic and other operations is enforced to prevent pollution, contamination, and silting of bodies of water and to preserve critical habitats.

The water protection zone includes river flood lands, upperland flood terraces, edges, and steep slopes of bedrock banks, as well as deans and ravines that flow directly into the river valley or lake basin.

Protective shorelines are located within the limits of water protection zones along the river banks, lake, and storage reservoir shores. The strips, which are much narrower than water protection zones, are located directly along the water. Any economic, or other activity, within the protective shoreline is under greater restrictions than those in the water protection zone.

Special conditions are imposed on land use in water protection zones and protective shorelines along rivers, lakes, other bodies of water, and in districts and sanitary zones which protect sources of drinking water. The special conditions for land use involve restrictions on certain rights, or prohibitions on rights, of land owners, lifetime owners, and users or lessees, whose land parcels are located within the above zones. Procedures for establishment and use of the area, with special conditions for land use, are determined by the law of the Russian Federation and its subjects. General regulations on the establishment of water protection zones are contained in the Land Code of

the RSFSR² of 1991, and in the *Water Code* of the RF of 1995.

For instance, the *Land Code* of the RSFSR, providing for establishment of the water protection zones, sets out that their boundaries are fixed on the site using special information signs. Land parcels within the zones are not withdrawn from the people, but their use is regulated.

The RF *Water Code* defines water protection zones and protective shorelines along bodies of water, the objectives for their creation (article 111), special conditions for granting plots of land, and forests in the water protection zone (Articles 112, 113); lists prohibited activities on protective shorelines (article 111); contains general requirements for operational procedures in water protection zones (article 108), use and protection of forests in water protection zones (article 113), and control over the use of lands and forests in these zones (article 112, 113). All these issues will be discussed below.

The procedures for establishment of water protection zones, protective shorelines, sanitary zones for protection of water supply sources, and the special legal regime are detailed in the *Regulations on Water Protection Zones of Bodies of Water and Protective Shorelines* approved by Resolution of the Government of the RF dated 23 November 1996, No. 1404; in *the Regulations on Water Protection Strips (Zones) along Small Rivers of the RSFSR* (approved by Resolution of the Council of Ministers of the RSFSR dated 14 January 1981, No. 28

^[1] The Russian Federation is comprised of 89 units roughly analogous to the "states" in the U.S. System. These 89 "states" are divided into 4 categories: Oblasts, Krais, Republics, and Okrugs. All 89 are referred to collectively as subjects of the federation. The Istra region is located in the Moscow Oblast.] [editor's note]

^{[&}lt;sup>2</sup> RSFSR – Russian Soviet Federative Socialist Republic. Prior to the dissolution of the Soviet Union in 1991, Russia was one of the 15 republics of the Soviet Union and was known as the RSFSR. After the break-up of the Soviet Union the RSFSR became the Russian Federation (RF), but RSFSR legislation remains in force unless specifically repealed.][editor's note]

"On Strengthening Protection of Small Rivers from Pollution, Contamination and Depletion and on Sustainable Use of Their Water Resources"); in the Regulations on Water Protection Zones (Strips) along Rivers, Lakes and Reservoirs in the Moscow Oblast (adopted by Resolution of the Executive Committee of the Moscow Oblast Soviet of Peoples Deputies dated 2 January 1990, No. 15/1); in Resolution On Sanitary Protection of Water Pipelines and Sources of Water Supply (adopted by the Central Executive Committee and the Council of Peoples Commissars dated 17 May 1937); in Sanitary Regulations SP 2.1.4031-95. Sanitary Zones for Protection of Sources for Drinking and Domestic Water Supply in the City of Moscow.

These documents state how the size of water protection zones, protective shorelines, and areas of sanitary protection of the drinking water supply are determined. They also define the procedures to establish water protection zones and what activities are prohibited in them.

In accordance with the Regulations on Water Protection Zones of the Bodies of Water and Protective Shorelines, zone size and boundary lines, as well as the regime of their use, are determined on the basis of physico-geographical, soil, hydrological and other conditions. These zones are then approved by the executive authorities of the subjects of the Russian Federation upon submission by basin-based and other regional administration authorities for water use and protection under the Ministry of Natural Resources (MNR) of the RF in concurrence with specially authorized environmental state bodies, sanitary epidemiological surveillance bodies, and others.

Areas and boundaries of the water protection zones on the territory of the Moscow Oblast are approved by the Administration of the Moscow Oblast upon presentation made by the Moscow-Oka Basin Water Management Department in agreement with the Moscow Oblast Environmental Com-

mittee and Oblast bodies for sanitary surveillance.

The width of water protection zones for rivers and lakes is set on the basis of the multi-year average water edge in the summer time and depends on the river's length. For the smallest rivers (up to 10 kilometers long), the minimum width of a water protection zone is 50 meters. For the Istra River, which is 113 kilometers long, the minimum water protection zone is 300 meters. Small rivers, such as the Noudol' (43 kilometers long) and the Katysh (22 kilometers long), should have water protection zones with a minimum width of 110 meters. For reservoirs, the size of their water protection zones is determined from the water edge at the time of standard backwater level. For lakes and reservoirs consisting of two square kilometers, a minimum water protection zone is 300 meters. For those over two square kilometers, it is 500 meters. For instance, the water protection zone for the Istra reservoir has been set at the width of 500 meters.

Sizes and boundaries of water protection zones in cities and other residential localities are established on the basis of the specific conditions pertaining to their planning and development, in compliance with approved general layouts.

According to the regulations, a protective shoreline should be established at all times. However, in cities and other populated localities where storm water drainage and embankments are available, it is permissible to combine the boundary of protective shorelines with the embankment parapet.

The law also provides for the establishment of the sanitary protection zones for district drinking and domestic water supply sources. The purpose of establishing these zones is to protect waters used for drinking and household water supply. When sanitary protection zones are established, the minimum sizes of water protection zones and the regimes governing their use are established in the sanitary regulations and standards. The Regulation On Sanitary Protection of Water Pipelines and Water Supply Sources outlines the procedures for establishing sanitary protection zones for open and underground sources of water supply. Special legal regimes for the territory of each of the three belts, into which a sanitary protection zone is divided, prohibit certain activities.

Why should we protect water protection zones? Their condition influences the normal functioning of large and small rivers, lakes and reservoirs – water resources used to supply water to regions, for recreational purposes and other uses.

In addition, flood lands situated within water protection zones are priceless natural assets. The flood plains are the best grazing lands in summer. And the flood plain itself, with fertile alluvial soils, is an excellent location to grow many field crops, including vegetables. Forests and bushes in water protection zones, which grow on upperland flood terraces and slopes of bedrock banks as well as deans and ravines, prevent shore cutting and sliding, as well as bed silting, and influence the river flow and water quality. Forests and bushes also reduce the rivers' hardness and diminish concentrations of suspended materials. Therefore, the loss of forests in water protection zones may lead to adverse consequences for bodies of water.

Plowing flood lands that are part of the water protection zones and protective shorelines, leads to the destruction of microrelief which, in turn, deteriorates the drainage, which leads to super saturation and eventually causes the flood lands to become swamp. A water reservoir begins to become intensively covered with water plants and algae. When water plants fails, oxygen is consumed as the plants decompose, lowering oxygen content in the water. Poorly decomposed silt is accumulated at the bottom of water reservoir which, combined with a shortage of oxygen, leads to the formation of hydrogen sulfide. Also, blue-and-green al-

gae emit special toxic substances that cause the extinction of fish and other water inhabiting species. When the flood lands are plowed, not only the bodies of water are damaged, but also the land itself is damaged due to washout of the most fertile layer of silt. In natural conditions, even with intensive floods, no erosion can actually be observed since plants reliably protect the flood lands from destruction. Heavy agricultural machinery leaves deep ruts that fill with water and cause great damage to flood lands. Later, adjoining sections of land may become swamp as a result.

As mentioned above, flood plains, which are part of water protection zones, were traditionally used as pasture lands. Animal pasturing is a common practice that not only leads to the destruction of meadow phytocoenoses but also leads to the degradation of flooded ecosystems. Flood lands have a special relief, featuring hummocks, ridges and holes. The process of turning flood lands to swamp progresses intensively. Plants that are resistant to pasturing and poorly eatable include wormwood, horse sorrel, hispid buttercup, pikes, and cornflower. In addition, damages affect not only meadows but bushes and forests as well. On the flood lands closer to the riverbed, bushes are either severely damaged, as a result of cattle pasturing, or cut away to increase the pasturing area. This prevents silt settlement and leads to the erosion of flood lands near the riverbed. Pasturing also promotes the formation of worn-down cattle paths which eventually generates cracks in the soil. If water accumulates in these cracks, lower winter temperatures, resulting in the formation of ice crystals, widen cracks and extend them from the shore. Eventually, this results in the sliding and collapse of the shore.

Another environmental threat to water protection zones is surrounding residential areas. The problem of solid domestic wastes is very acute. River banks and ravines that empty into river valleys are often landfill areas. During floods and rains, landfill runoff flows directly into the river. Un-

authorized, un-equipped dumps not only create an unpleasant view but also pollute the soil and water with pathogenic bacteria, oil products, heavy metals, and other substances. In addition, each residential property contains wastes which are stored in close vicinity to the house for the purpose of future fertilizer. Often, the proper storing procedures are not followed and, during spring thaws and rains, these wastes serve as an additional source of environmental pollution.

The preceding factors cause severe damage to the natural resources located in the water protection zones and indirectly, they adversely affect water quality in water reservoirs. However, there is also a direct impact of economic activities on the hydrological conditions of rivers, which is discussed next.

2. What Kind of River Do I Live, Work, and Vacation Near?

This is a very important question. If you know the answer, then you probably understand the need to protect the river and other bodies of water located near your residence. You probably also realize the need to comply with the requirements of the regime for managing the water protection zones. It has nothing to do with the name of a river, though knowing the name of a river or lake would not hurt. The environmental importance of a water reservoir and its applications determines the requirements and regulations for using it, as well as the size and legal regime of the water protection zone and protective shoreline.

All of the rivers in the Istra region, except for the Istra river, belong to a group of so-called "small rivers." These are rivers which are under 100 kilometers in length and have a catchment area under 2,000 square kilometers. These rivers are emphasized because small rivers have several unique properties and features that need to be taken into account in designing measures for their sustainable use and protection, as well as their water protection zones. The main feature is that small rivers are the first link in the river network; any changes in their management impacts the entire chain. This factor is very important for the Istra region because it is the source of drinking water supply for the city of Moscow.

Changes in rivers and water reservoirs may be both natural and anthropogenic in origin. In the first case, they are usually cyclical resulting from periodic climatic fluctuations. Deviations from the regular regime of the river, discovered in one period or another, eventually vanish, often deviating greatly from the original situation. In the second case, the deviations discovered are quite sustainable especially when it concerns small water reservoirs.

Another important feature of a small river is that it is closely linked with its sur-

rounding landscape. Processes that occur in a small catchment area have an immediate impact on the condition of the river, its flow and course; at the same time, however, these factors, when determining the formation of the flow of a large river, have a mutually abating character, due to the different timing of the impacts over the more extensive territory of a larger catchment area. Reduced water volumes in small rivers result from unsustainable water consumption resulting from water engineering on rivers or water intake for production purposes, including land irrigation. As a result, the flow progressively decreases, established channel processes change, and water is polluted. This, in turn, leads to the shallowing of a small river, alterations in its appearance, and loss of its domestic, environmental and recreational relevance. Economical use of underground waters is the key to replenishing small rivers during low water periods.

One should also highlight the role of forests in the existence of small rivers. which is more important compared with its role with respect to large and medium-sized rivers. First, the boundaries of limited catchment areas of small rivers do not exclude the possibility of complete deforestation or a considerable decrease in forest cover, which, can lead to decreased feeding of the soil and the shallowing and even drying up of the river. The possibility of this occurring in large and medium-sized rivers that drain significant areas in terms of their space and climatic conditions is greatly reduced. Second, small rivers, which take in a limited amount of water and are poorly diluted with water inflows, are seriously threatened by silting and pollution. Third, trees and bushes growing on the banks of small rivers are of great importance. In addition to preventing erosion and abrasion of the banks, trees and bushes provide substantial shadows over the surface of the water, more so than over big rivers. All of this reduces evaporation and warming. This all should be taken into consideration while arranging land use exercises such as cutting or planting, and area plowing in the water protection zones of the small rivers and adjoining areas.

Completing the environmental description of rivers in the Istra region, it should be reiterated that, in comparison with medium-sized and large rivers, small rivers are narrower. This narrowness serves as quite a disadvantage with respect to negative impacts on water catchment caused by human activities, both in the water protection zone and on the rivers and water reservoirs themselves.

Complying with the Water Code of the Russian Federation, bodies of water can be used to supply water for the health sector, for the industry and energy sectors, for agriculture, forestry, recreation, transport, construction, fire-fighting services, fisheries and hunting, and for other purposes. However, prioritized uses of bodies of water are reserved for drinking and domestic water supply. Standards for maximum permissible concentrations of harmful substances in bodies of water and sewage waters are determined upon the specific application of a body of water. The strictest standards are established for the bodies of water used for fisheries as well as those used for drinking and domestic purposes.

If a river or another body of water (a natural aquatic ecosystem) is of special environmental, academic, cultural, aesthetic, recreational or health relevance, it can be designated a specially protected body of water. Such bodies of water are withdrawn from any economic activities in whole or in part, on a continuous or a temporary basis. Such areas include wetlands, streams and water reservoirs classified as unique natural landscapes, spawning spots of valuable fish species, or body of water head or mouth protection zones. Water protection zones, which are sources of drinking water supply or spawning spots of valuable fish species, may, in turn, be designated specially protected areas in a manner established by the RF Government.

Sanitary protection zones and districts are established to protect the bodies of water used for drinking and domestic water and containing natural medical resources.

Any information you need regarding the bodies of water close to your property can be obtained from your regional administrative authority on the use and protection of water resources or from your regional state authority on environmental protection.

3. Activities in Water Protection Zones and Their Impacts on Bodies of Water

As previously noted, water quality is affected by human economic activities. The basin of the Istra River and the Istra reservoir has a population of about 150,000 people. In addition, many vacationers visit this region during the summer months. The industrial sector is concentrated in two towns: Istra and Dedovsk. Their economy is primarily centered around food, light, and forest industries. However, this region is mostly an agricultural area. It accommodates eight large farming enterprises, located in the Istra region, which primarily specialize in animal breeding. The private farming sector is currently being developed along with the large farms, where one-third of the farms are involved in animal breeding and the remaining two-thirds specialize in crop growing.

According to the Water Code of the Russian Federation, waters are subject to protection from pollution, contamination and depletion that may damage the health of the community, reduce fish resources, deteriorate water quality and entail other adverse This deterioration results from effects. changes in physical, chemical, and hydrobiological properties of water resulting in a decrease in water's capacity to undergo selfpurification. The extent to which water is polluted is determined by the concentration of harmful admixtures in the water. It is assessed on the basis of the requirements of various sectors of the national economy. The strictest requirements apply to domestic, cultural, fish management, and drinking water uses, because of the threats to community health and the downgrading of the sanitary status.

The critical indicator of water quality is the ratio between the actual and maximum allowable concentration of harmful substances. The maximum allowable concentration (MAC) of harmful substances in water is a basic standard underlying the system of water quality control. MAC stan-

dards (mg/l) have been developed for the majority of substances flowing into water reservoirs. The copper MAC, for instance, is 1.0 mg/l, iron -0.3 mg/l, oil products -0.3mg/l, etc. (water supply for domestic and drinking purposes). Sewage water polluted in excess of MAC at the sampling station is not allowed to be diverted to the water reservoir. The sampling station that controls water quality at the Istra reservoir is located at the section of the village of Piatnitsa. According to data measured over the last years, MAC for domestic and drinking purposes are 1.4 MAC for iron, and 6 MAC for phenols in the Istra reservoir: and for the Istra river – 2.3 MAC and 5 MAC, respectively. Contents of other harmful substances in water correspond to their respective standards.

Biochemical oxygen demand (BOD) suggests the presence of soluble oxygen in water (mg/l) required for oxidation or decomposition of pollutants, which are mainly organic substances. The content of soluble oxygen is determined by the ratio between consumption of water by pollutants and reaeration of water by oxygen (water saturation with oxygen). Oxygen replenishment basically takes place through water contact with the atmosphere. It depends on the surface area of the water, the degree to which oxygen is saturated through the surface layer, and the intensity of water mixing. A difference between the amount of oxygen under complete saturation and actual saturation is an oxygen deficit expressed in either milligrams per liter or as a percentage of the complete saturation (BODc). For water sources used for drinking and domestic purposes, BODc's at areas of water intake should not exceed 3 mg/l. BODc of untreated domestic sewage is 200 mg/l. By comparing these two BODcs values, one can see the damage caused to the water reservoir through discharge of untreated and poorly treated sewage. The calculated indicator for the Istra reservoir was 5.2 mg/l in 1993.

A pH value determines concentration of Hydrogen ions in the water, indicating the acidity and alkalinity of the water. Near social and residential areas and/or properties, a pH value should not exceed 6.5 or 8.5, respectively. In 1993, an indicator was 8.00 units (at the sampling station of the village of Piatnitsa) for the Istra reservoir. This indicates a weakly alkaline reaction of the fluid.

Water organoleptic properties include odor, after-taste, and floating admixtures adversely affecting a human being. The odor is assessed using points from zero (no odor) to five (very strong odor). In social and domestic assets, water should not have odor intensity exceeding two points (weak odor, i.e. such odor that does not attract attention of the consumer but lends itself to detection if one is concerned). A similar scale is also used to assess water taste intensities. Taste properties are usually defined in concentrations exceeding odor ceilings.

During the last few decades, the number of diseases related to water-borne pathogens has greatly increased. Sewage water from inhabited localities, animal breeding farms, and a number of production facilities (slaughter houses, biofactories, tanneries, wool washing plants, etc.) is infectious. Essentially, water from district water supply sources must not contain pathogenic organisms. However, given the difficulty detecting them, indirect methods are applied such as identifying the amount of colon bacillus in the water. According to Russian law, pollution of drinking water reservoirs with bacteria should not exceed one thousand coli bacillus per liter (coliindex of one thousand) when regular methods of drinking water purification and disinfection are applied. Therefore, if the concentrations of coli bacillus reduced to the indicated levels, there is a general belief that the availability of vital pathogenic organisms in the water is unlikely. Hence, the water reservoirs used for a drinking water

supply are considered to be sufficiently pure if appropriate purification and disinfection are arranged at water pipeline plants resulting in a coli-index of under one thousand. This illustrates that the waters of the Istra reservoir are polluted. During the summer of 1993, the coli-index reached 170,000. The bottom layers of water contain the most pollution.

Pollution sources are the facilities that discharge harmful substances to the bodies of water that deteriorate quality of the surface and underground waters. These sources result in limiting water usage and adversely affecting the environments of the bottom and the shores of bodies of water. The basic sources of pollution and contamination for the Istra River and Istra reservoir are as follows:

- sewage water and storm sewage of industrial and agricultural enterprises;
- domestic and storm sewage of urban and rural residential localities and recreation facilities;
- sewage water from animal breeding facilities;
- flushing of biogenic substances from agricultural lands;
- massive use of the shores at reservoir and banks of rivers for unauthorized recreation and construction of holiday cottages.

Sewage water from industrial and agricultural enterprises contains various organic and non-organic compounds. Almost all of the industrial sewage is, to a certain degree, polluted with oil products that adversely affect water quality. Even a limited presence of oil (0.2 mg/l to 0.4 mg/l) gives waters a specific odor that fails to disappear after chlorination and filtration.

Phenolic compounds, found in industrial waste waters, present a serious threat. As stated above, phenolic excess in the Istra river is 5 MAC. The phenolic sew-

age possesses strong antiseptic properties which disrupts biological processes in the water and adds pungent, unpleasant odor to it. Synthetic surface active agents (SSAA) that appear in the waste water of some production facilities severely lower water's biochemical purification capacity. Therefore, even with limited SSAA concentrations, growth of water plants ebbs, after-taste and odor become stronger, and persistent aggregations of foam are created.

A great number of pollutants are discharged via municipal runoffs from the towns and other residential localities. addition to sewage waters, municipal runoffs include harmful compounds caused by the domestic applications of chemicals as well as by the enterprises of food, public catering, health, and trade sectors. Any presence of pathogenic microbes and viruses in the municipal sewage, in addition to helminths, make them especially dangerous for human health. Domestic wastewaters bring biogenic substances – nitrogen and phosphorus – to the river water. Their contribution to water problems lies in their production of uneven flow which complicates operation of the municipal sewer system. Additionally, inhabited localities pollute bodies of water from overland rain and thaw runoffs originating in streets, yards, and sites where industrial enterprises are located. These runoffs contain oil products, chlorides applied to fight icing on the highways, and other specific impurities.

Domestic and industrial sewage waters include a significant portion of suspended organic and mineral substances. These substances may deteriorate water's organoleptic properties and sometimes are harmful for human beings. Therefore, while discharging waste water, the contents of suspended particles should not augment water reservoirs used for drinking water supply or water supply for food factories by more than 0.25 mg/l and should not augment water reservoirs used for recreation purposes by more than 0.75 mg/l.

Major sources of pollution result from the runoff from animal breeding farms. Both large animal complexes and small private farms face this pressing problem. To facilitate livestock watering, farms are often located close to shores of water reservoirs. If liquid manure tanks and manure storage facilities are not available, the wastes are easily washed away by storm waters or they are discharged into the water. Wastes from animal breeding farms are dangerous because they contain parasitic eggs and pathogenic microorganisms that are the sources of many diseases. Wastes of pig breeding farms are especially dangerous. The pollution of a city populated with 250,000 people is equivalent to the pollution from one farm containing 100,000 livestock. The problem of protecting waters from the runoffs of animal breeding facilities is exacerbated by the challenge to provide sanitary support for holding lagoons, thereby utilizing wastes.

In recent years, the impact of sewage from agricultural and industrial facilities upon the Istra river has diminished. This is due to the total reduction of production facilities in the region. At the same time, pollution caused by flows from urban and agricultural localities has increased. The total discharge of waste water in the Istra river channel tends to be on the rise: In 1994 it received an increase in waste water of 0.88 million cubic meters compared with the 1993 statistics.

Discharge of wastewater into water reservoirs must follow pre-treatment requirements. These requirements, however, are not always followed. Oftentimes, treatment plants have inadequate sewage holding capacities and some treatment plants even become non-operational due to wear and tear from this over-usage. The enterprise, having no financial capabilities to reconstruct these treatment plants, is forced to discharge wastewater without preliminary treatment. From 1993 to 1994, the total discharge of polluted sewage in the Istra River increased by 0.32 million cubic meters. In many inhabited localities there are no sewer

systems for storm waste water flow and thus it is discharged without any treatment.

Apart from immediate discharges of polluted sewage water, bodies of water are also polluted through the flushing of biogenic substances from agricultural lands. Intensification of agricultural production is accompanied by fast, incremental techniques of applying mineral fertilizers and chemical pesticides. This results in a situation where several chemicals, including pesticides, impact the environment. Some are resistant to external impacts and retain their properties during long spans of time. The pesticides accumulate in the soil and are then washed away into both surface and underground water reservoirs. When the fields are sprayed aerially, the pesticides are able to directly return into water sources. Animal breeding farms and poultry factories, which lack manure storage facilities, are extremely harmful to water protection zones and bodies of water. The manure created in winter frequently is taken to the fields, creating a problem as water thaws, flows into ravines and rivers, becomes saturated with the organic substances, and eventually acquires a manure-like odor.

A special threat of water pollution from fertilizer and pesticides lies in the fact that flows through fields are impossible to channel through the treatment plants. In addition, large areas of many farm lands are significant river watersheds and thus water originating from them travels to bodies of water. Over one year, the Moscow Oblast accumulates up to 15 million tons of manure and bird droppings. Oblast rivers are frequently polluted with ammonium nitrogen exceeding the standard two to four times, nitrates – three times, mineral phosphorus – two to two-and-a-half times, copper – three times, nickel – one-and-a-half times. It is also polluted with lead, mercury, strontium and other heavy metals. Research studies have established that of the fertilizers applied, about 20percent nitrogen, 2.5 percent phosphorus, and 30 percent potassium enter the water sources. Thus, the agricultural

sector proved to be a major water polluter of the Istra river basin due to its biogenic substances (nitrogen and phosphorus). Nitrogen and phosphorus contribute to the intensive development of phytoplankton (water "bloom") and higher water plants, stimulate growth of undesirable water organisms, and lead to disruptions in the process of selfpurification. The intensified water grass development influences water color, taste, and odor. The content of biogenic substances in the water of the Istra reservoir and the Istra river correspond to the standard, with regards to domestic and drinking water standards, however, in terms of fishery industry standards (which are stricter), one can, on average, note a two-fold excess of MAC for ammonium nitrogen and a one-and-a-quarter fold excess for nitrogen nitrites.

Regarding pollution and contamination conditions, areas involving bodies of water, such as the banks of Istra river, are also influenced by popular and unauthorized utilization of the shores of reservoir for recreation and intensive vacation-home construction. Vacationers frequently destroy bushes that are located close to the river channels, tread upon grass, and litter their property with wastes including garbage and oil products (in the case of those who tour by car). A major portion of recreational pollution is associated with rest houses, pioneer camps, and tourist facilities due to the ineffectiveness of treatment plants. majority of these recreational facilities, for instance in the area of the Istra reservoir, border the 100 meter protective shoreline and never go beyond the limits of a 500 meter water protection zone. Of the rest houses located there, only one-tenth feature any type of treatment plant. Intensive summer cottage and detached-house construction leads to the destruction of undergrowth and creation of an enormous amount of garbage. This then damages the forests located along shorelines, thereby harming catchment areas. Garbage and products of its decomposition are washed away by storms and thaws into the bodies of water, further contributing to their pollution and contamina-

Economic activities, which expand yearly, often lead to severe environmental consequences, thus ranking the issue of water protection among the most critical issues of sustainable environmental management. The establishment of water protection zones is one of the main actions to be taken in resolving this issue. It is obvious that concurrent with this, other ways of protecting bodies of water, such as sewage treatment, improvements in production technologies (including reduced water consumption to the extent of shifting to a waste-free technology), broader application of sewage recycling in re-circulated water systems, and regulation of conditions for using chemicals in the agricultural sector, should be developed in any way possible.

Characteristics of the Istra River Watershed

						Adm	inistrative l	Districts		
No.	Indicators	Units of	Total	Istrin-	Klin-	Krac-	Solnech-	Puzskii	Odint-	Volo-
n/n		Meas- urement	for the Water-	skii	skii	nogor	nogor		sovskii	kolam- skii
		arement	shed							Sicii
	•	•	•	I. G	eneral Cri	teria	•		•	•
1.	Territory	Km ²	2050	1075	380	60	419	47	65	
1.1	Farming	1000 ha	46.02	27.83	8.05	0.9	8.81	0.43	-	-
	Of that,	1000 ha	37.99	22.56	8.81	0.9	7.41	0.31	-	-
	plowed fields									
1.2	Dacha	1000 ha	4.35	3.50	0.17	0.06	0.62	0.002	-	-
	(summer cottages)									
2.	Population	1000s	165.0	126.4	4.73	21.27	12.52	0.09	-	-
	- urban	1000s	107.7	87.0	-	20.0	0.63	-	-	-
	- rural	1000s								
3.	Livestock									
	- Cattle	1000	29.37	18.99	4.0	1.8	4.48	0.30	-	-
	D:	head	1.50:	17.5.			0.15		1	
	- Pigs	1000 head	16.04	15.94	-	-	0.10	-	-	-
	- Poultry	Million head	6.84	5.02	-	-	1.82	-	-	-
					ter Resou	rce Use				
1.	Water	Millions	44.0	34.37	1.34	4.09	4.01	0.009	0.18	-
	Intake	cu. m.								
	- ground	Millions	32.62	23.53	1.34	3.99	3.57	0.009	-	-
	water	cu. m.	44.00	1001		0.10	0.44		0.10	
	- surface	Millions	11.38	10.84	-	0.10	0.44	-	0.18	-
2.	water Water Consu	cu. m.								
۷.	-household	Millions	11.26	7.87	0.51	2.29	0.59	_	-	_
	use	cu. m.	11.20	7.07	0.51	2.2)	0.57	_		_
	- industrial	Millions	6.19	4.77	_	1.42	<u> </u>	_	_	_
	maastrar	cu. m.	0.17	7.77		1.72				
	- farming/	Millions	6.75	4.93	0.35	0.16	1.20	0.009	-	-
	agriculture	cu. m.								
	- irrigation	Millions	2.95	2.31	-	0.10	0.44	-	-	-
		cu. m.								
	- recreation	Millions	8.92	6.46	0.48	0.12	1.68	-	0.18	-
		cu. m.								
	- fishing	Millions	8.03	-	-	-	-	-	-	-
2	D: 1	cu. m.				-			1	<u> </u>
3.	Discharge	M:11: -	10.20	7.07	0.20	2.20	1 0 4		1	
	-household	Millions	12.38	7.87	0.39	2.29	1.84	-	-	_
	-industrial	cu. m. Millions	4.75	3.03	_	1.72	_	_	_	
	-muustrai	cu. m.	4./3	3.03	_	1./2	_	-	_	_
	-farming/	Millions	4.67	3.42	0.29	0.13	0.82	0.005	-	_
	agriculture	cu. m.	1.07	3.42	0.27	0.13	0.02	0.005		
	- irrigation	Millions	0.028	0.023	-	0.001	0.004	_	-	_
		cu. m.								
	- recreation	Millions	8.12	5.96	0.48	0.12	1.44	-	0.13	-
		cu. m.			<u> </u>		<u> </u>			
	- fishing	Millions	6.01	-	-	-	-	-	-	-
		cu. m.	<u></u>				<u> </u>		<u> </u>	

4. DO's and DON'Ts in a Water Protection Zone: Farmers, Holiday Cottage Owners, and Businesspeople

If you are a farmer or businessperson and your plot of land is situated in the water protection zone of a river, lake, or reservoir, you should be aware that a special regime is enforced in such an area. Essentially, this means that you may only be involved in economic activities if you comply with certain prohibitions. More specifically, farmers, businesspeople, and cottage owners are prohibited from engaging in activities that would lead to pollution of a protected reservoir. These activities include:

- aerial chemical spraying, i.e. spraying chemicals over the earth from a plane;
- applying of the toxic agents to fight pests, plant diseases and weeds;
- use of manure as fertilizers;
- establishing warehouse facilities for toxic agents, mineral fertilizers and gas welding materials; sites for charging the equipment with toxic agents; animal breeding facilities and farms; sites for storing and burying industrial, domestic and agricultural wastes; holding lagoons;
- storing manure and garbage;
- industrial logging;
- establishing land parcels for cottages, orchards and vegetable gardens when the width of water protection zones is under 100 meters and steepness of the slopes on adjoining territories is greater than three degrees.

Furthermore, if there is no approval from the basin or other regional authorities for using and protecting water resources of the Russian Ministry of Natural Resources, you are neither allowed to construct or modify buildings, structures, communications, and other facilities, nor to produce mineral resources, excavation and other works.

Within the limits of *protective* shorelines of the rivers, lakes, or reservoirs it is prohibited, in addition to the above prohibitions, to:

- plow land;
- graze, organize summer grazing livestock (except for using traditional places for stock watering), or arrange baths;
- apply fertilizers;
- store dumps of erodible soils;
- install seasonal fixed tents; arrange land parcels for holiday cottages, orchards and vegetable gardens, or allot plots for individual construction;
- ride cars and tractors other than specially designed automobiles.

In particular, if your farm exists in a water protection zone and it is designed to grow vegetables, potatoes, feeds, or other farm crops, you should design your farming systems based upon the farming systems developed by academic institutions. This will ensure that you will be following a set of measures that ensure your economic activities do not result in water pollution.

If you are vacationing in your holiday cottage or working in your orchard or vegetable garden, there are also requirements that must be followed. At plots of land used for cottages, orchards, or vegetable gardens, one should comply with the rules prohibiting pollution, contamination, and depletion of bodies of water. This means that in water protection zones you are not permitted to store toxic agents or mineral fertilizers. In addition, you are not permitted to apply toxic agents to fight pests, plant diseases, and weeds. Also, you may not arrange storage facilities for garbage, wastes, or manure, or use manure as fertil-

izer. Finally, you may not clear trees in the water protection zone.

If you are cultivating plots of land on the shorelines, then the prohibitions to plow lands, graze stock, and apply fertilizers, listed above, apply to your activities.

If you are a businessperson, farmer, or a vacationer, then according to the law, you are not only subject to the requirements above, but you are obligated to maintain, at a proper level, the present condition of the water protection zones and the shorelines along rivers, lakes, and reservoirs concurrently following the regime of use in their areas.

A person neglecting the proper use of areas in water protection zones including protective shorelines along rivers, lakes, and reservoirs will be liable under existing law. There are several types of liability envisioned, which, depending on violation, apply to the users of the land located in water protection zones: *administrative*, *civil*, *disciplinary*, *and criminal liability*.

Environmental law, health law, water law, and other natural resource law containing regulations for maintaining water quality, also contain certain liability regulations. Liability for negligence towards water protection standards is envisioned both by administrative and criminal law.

Obviously, liability occurs for actions that are illegal. However, the same actions may be called an offense or, in this case, *environmental offense*, which has its own meaning. *These are guilt bearing offensive* actions that infringe on the environmental law, cause damage to the environment and human health (Article 81 of the RF *Law "On Environmental Protection"*).

On the basis of Article 82 of this Law, officials, other than offending employees of the enterprises, institutions, or agencies bear disciplinary liability. They can be deprived of their bonuses, and other incen-

tives in whole or in part, for violation of environmental quality standards and environmental legislation. Officials and other employees guilty of the costs incurred by an enterprise, institution, or agency for damages caused through environmental offenses are materially liable to the enterprise, institution, or agency in accordance with the Labor Code (Article 83 of the RF Law "On Environmental Protection"). The size of indemnification and procedures for damages are usually determined by award of the court

The same *Law "On Environmental Protection"* (Article 84) envisions *administrative* liability for environmental offenses. There is a wide list of environmental offenses entailing administrative liability, including:

- non-compliance with environmental requirements for burying of radioactive materials, chemicals and other harmful substances;
- contempt of the instructions of the state environmental control authorities;
- untimely or distorted presentation of the information or refusal to provide information about natural environmental quality.

For these and other environmental offenses, the officials, enterprises, institutions, and agencies bear administrative liability in the form of a penalty. Penalties are imposed by state authorities who are entitled to do so by law. These are Interior Ministry bodies, local administration authorities, bodies of the State Sanitary Epidemiological Surveillance (SSES), and others, depending on which body has powers to control compliance with a particular law. For instance, if you violated sanitary standards, you may expect repercussions from the SSES, while infringement on the environmental requirements will make you, in all likelihood, liable to the local environmental committee.

Article 85 of the RF Law "On Environmental Protection" also stipulates that by conducting an environmental crime, the person who commits it is liable under the criminal law. Officials and citizens guilty of committing environmental crimes, i.e. socially dangerous acts infringing environmental law and order established in the RF. and environmental safety in the society, and causing damage to the natural environment and human health, bear criminal liability as set forth in the Criminal Code of the RF. The Criminal Code includes a special chapter (chapter 26) entitled "Environmental Crimes" that contains a number of articles establishing criminal liability relating to the environment. Specifically, paragraph 1, Article 250 of the Criminal Code, "Water Pollution," states that in the case of pollution, contamination, or depletion of the surface or underground water, sources of drinking water supply, or any other changes in their original properties – where these actions cause substantial damage to critical habitats, fish stock, forestry or agriculture – the result will be a penalty ranging from one hundred to two hundred minimum wages or from one to two month's wages, salary, or other income of the person found guilty, or it may result in either disfranchisement of the right to occupy certain positions or be engaged in certain activities for the period of up to five years, corrective labor for the period of up to one year, or arrest for the period of up to three months. Parts 2 and 3 of the same article define the degree of water pollution that results in more severe types of punishment – up to five years in prison in the event these actions resulted, due to carelessness, in a human death. A criminal liability is mandatory if so resolved by the court.

Now let us focus on the important issue of damages.

Enterprises, institutions, agencies and individuals that damaged the environment, human health, personal property, or national economy by polluting the environment, damaging, destroying or irrationally using natural resources, destroying ecosys-

tems and other environmental offense must correct the damages in full (Article 86 of the RF Law "On Environmental Protection"). Damage to the environment resulting from an environmental offense must be corrected either voluntarily or through a court (or commercial³ court) judgment, in compliance with the rates and methodologies for calculating the size of damage approved in an established manner or, in their absence, based on actual costs incurred to restore the original environmental state. The amounts for damages imposed, according to court or commercial court decisions, will be paid to the aggrieved party (individual, enterprise, or agency) to take measures to restore environmental losses or they will be transferred to the state environmental fund (if a natural site in common use was damaged). If several parties are at fault, damages should be assessed on the basis of each individual party's share therein (Article 87 of the RF Law "On Environmental Protection").

A separate corpus delicti is the damage done to human health by detrimental effects of natural environment. In this case, the damage caused by the activities of enterprises, agencies, or individuals is to be compensated in full. Again, either voluntarily or on the basis of a court judgment. The claims for damages may be filed in a court of law by the aggrieved party, his/her dependents, the prosecutor, a duly authorized state body, or public institution in the interests of the aggrieved party. The damages shall be collected from the party at fault, and, when it is impossible to identify it, the damages shall be paid out of the financial resources of the State environmental funds.

The Law in question envisions that enterprises, agencies, and individuals are entitled to file their claims in a court or

^{[&}lt;sup>3</sup> In Russian this is called and arbitrazhnii sud, which is often translated as "arbitration court", it is however, more accurately translated as commercial court, as it has nothing to do with arbitration in the English use of that term.} [editor's note].

commercial court to terminate environmentally harmful operations that cause damage to human health and property, the national economy, or the environment. A decision of the court or commercial court on termination of environmentally harmful operation is a basis for ceasing financing by respective banking institutions (Article 91).

A number of liability measures are set forth in the *Water Code* as well. Chapter 14 of the RF *Water Code* "Liability for Infringement on the Water Law of the Russian Federation" establishes administrative and criminal liability for *infringing on the water law* (Article 130). It also establishes liability of the individuals and legal entities for *damaging bodies of water* resulting from infringement on the water law (Article 131).

Complying with Article 130 of the *Water Code* of the RF, penalties for administrative offense are imposed by the officials of specially empowered state administration authorities for the use and protection of water resources within their competence. Payment of penalties does not relieve guilty persons of their obligations to cease their violations and undo damages.

The individuals and legal entities that have damaged bodies of water will provide indemnity either on their own or upon the decision of a court or commercial court. Claims to indemnify damages effecting bodies of water are submitted by a specially authorized state administration bodies for the use and protection of water resources, specially authorized state environmental protection bodies or a state body for sanitary epidemiological surveillance (Article 131 of the RF *Water Code*).

Liability for violation of water protection standards are also envisioned in the administrative law. In compliance with the RSFSR *Code on Administrative Offense* (Article 57), violation of the regulations concerning water protection, water pollution and contamination, or violation of the water protection regime in catchment areas re-

sulting in pollution or soil erosion by water and other harmful phenomena, entails penalty remedies imposed on the officials and individuals. In addition, in accordance with this Article, the officials bear administrative liability for commissioning and operation of the enterprises, municipal or other facilities that lack pollution control facilities or equipment.

5. Understanding DO's and DON'Ts in a Water Protection Zone

The main way to obtain information about the legal regime of land use is to review legislative acts dedicated to this issue. It is then necessary to understand your obligations as a land owner by examining your particular ownership position as defined by your land title, ownership certificate inherited at will, a land lease contract, or a contract for temporary land use. If you acquired a plot of land as a result of a sale contract, or obtained land under a deed of gift, contracts can also provide some information about the legal regime for using your plot. And, finally, the most accurate and complete information about how you may use your plot of land is provided by executive Oblast authorities, local governments, local committees for land resources and land management, environmental committees, water management committees, and sanitary epidemiological surveillance bodies.

Legislative Acts. The RF Water Code establishes those activities which are prohibited in protective shorelines and contains general requirements of operation in water protection zones including the protection of forests. For instance, as stated above, it is prohibited to plow lands, cut and uproot trees, arrange animal breeding farms and carry out other activities in protective shoreline areas. However, water supply facilities, recreation sites, fishing and hunting facilities as well as intake, port, and hydraulic engineering structures may be set up provided the license for water use is available (Article 111). Construction, explosion, and other possibly damaging work is to be carried out only with the agreement of a specially authorized regional state administration body responsible for the use and protection of water resources under the Ministry for Natural Resources of the RF (Article 108).

A more elaborate legal regime for water protection zones and protective shorelines is set forth in the documents mentioned

in the first section of this pamphlet: Regulations for Water Protection Zones of Bodies of Water and Protective Shorelines dated November 23, 1996, Regulations on Protective Shorelines (Zones) along Small Rivers of the RSFSR dated January 14, 1981, Regulations on Water Protection Zones (Lines) along Rivers, Lakes and Reservoirs in the Moscow Oblast dated January 2, 1990, Resolution of the ECC and CPC of the USSR "On Sanitary Protection of Water Pipelines and Water Supply Sources" dated May 17, 1937, and Sanitary Regulations "SP 2.1.4.031-95. Zones for Sanitary Protection of Sources for Domestic and Drinking Water Supplies to the City of Moscow".

These documents disclose activities which are prohibited in the water protection zone including the protective shoreline (see Section 4 above). The Resolution "On Sanitary Protection of Water Pipelines and Water Supply Sources" defines mandates pertaining to regional legal regimes in each of the three belts into which a sanitary protection zone is divided, including prohibition of certain activities. In particular, the first belt is actually withdrawn from any economic activity. It cannot be used for residential purposes or by any persons who are not directly involved in operations of the water pipelines facilities. Construction is also prohibited, except for construction linked with the water pipeline itself.

Entitlement. All individuals and legal entities whose plots of land are located in a water protection zone must have their entitling document - a land title (ownership certificate inherited at will, etc.). This deed, which certifies a title for a plot of land, is issued in a manner established by a regional or municipal committee for land resources and land management at the time of obtaining the plot of land. The deed is obtained upon resolution of the local administration (local government) or as a result of acquisition under the contract of sale, deed of gift,

will, or other actions aimed at disposing plots of land in line with the existing law. The certificate is also issued at the time of re-registering the already existing land title, available with the individual, to cultivate a private cottage plot, orchard, or vegetable garden, or construct an individual house.

A certificate format was approved by Decree of the President of the Russian Federation dated October 27, 1993 No. 1867 "On Regulation of Land Relations and Agrarian Reform Development in Russia." The certificate includes the section "Assets Description" where data about the plot of land is introduced and; in particular, restrictions as to its use as well as burdens imposed on the plot. Hence, if an individual's plot of land is within the water protection zone (protective shoreline) and the sanitary zone for protection of domestic and drinking water supply sources, then all the restrictions and prohibitions on land use established for this area, must be reflected in land title issued to its holder. If there are numerous restrictions for using the plot of land, an extract from regulatory acts indicating a specific regime for land use, such as a list of restrictions in land use, may be attached to the title document. A drawing showing land boundaries and numbers for areas (zones) where the land use restrictions or special regime are enforced, including restrictions and prohibitions arising from the special regime in water protection zones, should be attached to the certificate.

Contracts executing deals with land. In selling and buying plots of land, providing them as gifts, exchanging, assigning through inheritance, and also leasing them out or mortgaging them, a contract should be concluded in writing. This contract should be notarized and registered with the state in the established manner. It should state all the restrictions, burdens, and prohibitions which are set for this plot of land and also those which are due to its location in a water protection zone (protective shoreline).

A standard sale contract (a deed of purchase) for a plot of land, sold for personal support farming, holiday cottage purposes, gardening, and individual house construction (the format of the Standard Contract was approved by the RF Committee for Land Resources and Land Management on June 2, 1993) has a third section which is entitled "Burdens on the Plot of Land." This section states that a specified area (square meter, hectare) of a plot of land (its portion) in ownership transition, features restricted or burdened uses regarding the rights of the buyer(s). Boundaries on the lands that establish restrictions or burdens in favor of buyer(s), as well as contents of the restrictions or burdens are indicated in the land layout (or a drawing of land boundaries), which is attached to the contract and an inseparable part thereof. The contract is executed in several counterparts, of which, the first is submitted to the buyer, and the second to the seller.

State bodies. Information on whether specific plots of land are included in a water protection zone or protective shoreline and clarifications regarding the procedures for using plots therein can be sought from a state body which approves the size, boundaries of the zones (lines), and legal regime therein. In particular they can be sought from the Moscow Oblast Administration and local government (local administration), local environmental committee, or specially authorized state administration bodies that manage the use and protection of water, land, and forests.

In accordance with paragraph 5 of the Regulations on Water Protection Zones of Bodies of Water and Protective Shorelines (1996), executive power authorities of the Moscow Oblast local governments (local administrations) must inform the community, in a prescribed manner, of the water protection zone boundaries, of particular protective shorelines along rivers, lakes, and reservoirs and about the regime for economic and other activities within their limits. Protective shoreline site boundaries are

fixed using established water protection signs situated near basin-based and other regional bodies managing the use and protection of water resources under the Ministry for Natural Resources of the RF. With respect to reservoirs granted for isolated use, the same is fixed by water users.

In order to comply with the Resolution "On Sanitary Protection of Water Pipelines and Water Supply Sources" (1937), local governments must inform the community about the boundaries of a sanitary protection zone for water supply sources, their belts, and about the regulations in effect within the limits of this zone (part 8).

6. The Role of the Local Administration in Protecting Water Protection Zones

The objectives for effectively utilizing and protecting natural resources in certain protected areas are accomplished through state administration. They are based on implementing institutional, administrative and legal actions, combined with increasingly expanding economic measures, given the development of market relations in the country.

Generally, local governments (local administrations) in districts, towns, and other inhabited localities are the bodies which manage sustainable use and protection of natural resources. They act in the territories of their affiliation and resolve the issues of ownership, use, and disposal of municipal property. They also identify programs for regional developments and submit and withdraw plots of land, blocks of forest resources, and bodies of water. For these purposes, local governments (local administrations) adopt various legal acts establishing the mandatory requirements for all individuals and legal entities for sustainable use and protection of natural resources. They also make decisions on allocation or withdrawal of specific plots of land, blocks of forest resources, and bodies of water to individuals and legal entities. In carrying out these functions, one should take into account the interests in preserving natural resources in water protection zones and sanitary protection zones.

According to Article 112 of the RF Water Code, executive authorities of the Moscow Oblast specially authorized environmental committees under authority of government in charge of using and protecting water, land and forest resources implement public monitoring of compliance with the regime for the use and protection of natural resources. They also exercise control over other activities of the individuals and legal entities in the water protection zone.

The authority of the Moscow Oblast Administration, with respect to the oblast land resources, also covers lands in water protection and sanitary protection zones regarding:

- design and implementation of the programs for sustainable land use, improvement in soil fertility, and land resources protection, in conjunction with other environmental arrangements; establishment of the regime for land use;
- arrangement and implementation of the control over the use and protection of lands;
- control over allotment of the plots of land which belong to the lands on water protection and sanitary zones, by local administrations.

Specially authorized government authorities for natural resources in the Moscow Oblast are:

- the Moscow-Oka Water Management Authority;
- the Moscow Oblast Committee for Land Resources and Land Management:
- the Moscow Oblast Environment Committee, etc.

Local governments (local administrations) in charge of environmental issues within their jurisdictions take account of and assess: environmental health and natural resources, and the volumes of industrial wastes on the sites without regard to their ownership and affiliation. They also plan, finance and provide equipment and materials for environmental protection measures, issue licenses for selected types of environmental management, emissions and discharges of harmful substances, and make decisions on restricting, suspending, or terminating environmentally detrimental ac-

tivities. Activities of the local governments (local administrations) in environmental education, training, and public awareness (Article 10 of the RF *Law "On Environmental Protection"*) are also extremely important.

According to the Regulations on Procedures for Implementing Public Control over the Use and Protection of Land in the RF (approved by Resolution of the Council of Ministers of the Government of the RF dated 23 December 1993), local bodies of the State Land Committee of Russia, the State Environmental Committee of Russia, and sanitary epidemiological surveillance authorities for architecture and construction carry out the following public control on the territory of water protection zones:

- compliance of individuals and legal entities with the established regime for using the plots of land according to their targeted uses and requirements of the law as applied to land protection;
- prevention of unauthorized occupation of the plots of land, unauthorized construction, cutting green plants in urban and other localities;
- compliance with land, environment, and sanitation laws in designing and constructing facilities;
- fulfillment of nature conservation requirements in allotment of land for all kinds of economic activities:
- compliance with standards and regulations for planning, urban and other development;
- prevention of storage of garbage on lands, contamination of soils with runoffs, pesticides, mineral fertilizers, toxic and radioactive substances.

These authorities monitor land usage in water protection zones and, in the event of discovering non-compliance with legal requirements regarding their use and protection, develop statements which are

submitted for review by relevant commissions in order to institute administrative proceedings against the offenders. Officials in these bodies are entitled to review such cases independently as established by law.

Duly authorized public land control authorities may suspend the following industrial, civil, and other construction: development of deposits of natural resources, operation of the facilities, and works of various types if they violate established require-They submit materials regarding land, environment, and other law violations to relevant authorities in order to institute proceedings against offenders. They apply, free of charge, to the court or commercial court regarding cases of damages resulting from violations of land law, repealing illegal decisions on confiscation or allotment of the plots of land, and cases on imposing penalties on individuals and legal entities.

The environmental committee not only effects public control over the use and protection of lands, but also the use of surface and underground waters, forests, and other natural resources on affiliated territories. They arrange, in established cases, environmental inspection by state facility experts of construction or restoration in water protection zones. In addition, they issue licenses for storing industrial, municipal, domestic, and other wastes, for emissions or discharges of the pollutants to the environment, as well as licenses for the use of natural resources. These licenses may suspend or limit operations of enterprises and other facilities, without regard to their ownership or right to the natural resources, should they operate in violation of environmental law. In addition, the environmental committee files claims for damage caused through violations of the environmental law, draws up protocols, examines cases of administrative offense concerning violations in the environmental area and use of natural resources, and exercises other managerial functions to conserve natural resources on the affiliated area, including water protection zones and protective shorelines (Article 7 of the RF Law "On Environmental Protection").

State authorities for controlling the use and protection of bodies of water, under the Ministry for Natural Resources of the RF, control compliance with setting procedures for the boundaries for the following protective shorelines: water protection zones of the bodies of water and sanitary protection zones of domestic and drinking water supply sources. They also control availability of water treatment facilities at industrial, agricultural, municipal and other facilities involved in economic and other activities, located within the water protection zone. In addition, they prevent unauthorized development, enforce established procedure for allotment of both land plots (in conjunction with the State Land Committee bodies), and forests in water protection zones and ensure observance of the regime of their use and protection (in conjunction with the Federal Forestry Service of Russia). Government inspectors, who control the use and protection of bodies of water, primarily notify the users of water protection zones in writing about violations of the water law revealed during inspections. Next, they submit requirements to the individuals and organizations, regardless of their ownership and affiliation (including classified agencies), regarding actions to improve health, use, and protection of bodies of water, as they arrange control over wastewater and its influence on the bodies of water. Following this, they review cases of administrative offenses and proceed against the offenders using administrative remedies. Then, they check on the enforcement of procedures for approval of the construction sites on the territory of shorelines and water protection zones of the businesses and other facilities that influence the health of bodies of water. Finally, they participate in activities of the government commissions that accept commissioning of these facilities, etc. (Regulations on State Control Over the Use and Protection of Bodies of Water approved by Resolution of the RF Government dated 16 June 1997, No. 716).

Specific objectives of the legal regime in water protection zones presuppose special procedures for allotting land plots as well as forest blocks in the vicinity of water protection zones by the administration (local government). According to the Water Code of the RF, an individual interested in obtaining a plot of land must get the approval of a duly authorized administration body dealing with the use and protection of water resources (Articles 112, 113). To carry out construction, for example, demolition and other works would also require the agreement of this authority (Article 108). The duly authorized body for dealing with the use and protection of water resources also controls the use of forests in water protection zones. In doing so, it is entitled to suspend or ban works adversely affecting the environmental health of bodies of water (Article 113).

Users of land parcels, bodies of water, and other natural objects in the territory of protective shorelines, must follow necessary conditions defined by public officials (who control the use and protection of natural areas). They must also provide data on records and sectoral supervision information, technical documents, production and service forms and records, design estimates and other materials regarding the use and protection of these areas. If managers of the enterprises and organizations evade the requirements of controlling authorities, they are liable under law.

The officials that exercise public control over the use and protection of bodies of water, lands, forests, and other natural resources in the water protection zones are liable, under law, for taking (and failure to take) measures against those who ignore or break the law.

7. Defending the Rights of the Individual

The Constitution of the Russian Federation stipulates that recognition, observance, and protection of the rights of individuals is the duty of the state (Article 2). In Russia, state protection of citizens' rights and freedom are guaranteed. Each and every person is entitled to protection of his/her rights by all means allowed by law (Article 45).

Articles 33 and 46 of the *Constitution* are important because they guide individuals through the means of defending their rights. These articles set forth the basic provisions for appeal through administrative or judicial means. For instance, complying with Article 46 of the *Constitution*, or other direct regulations, such as Article 11 of the *Civil Code*, an individual may defend his/her legal rights, in particular, by taking legal action.

Individuals may defend their rights initiating criminal or administrative cases by filing a written application or making an oral complaint to the prosecutor's office or other competent authorities. They should keep track of the subsequent flow of the applications.

With respect to the topic of this pamphlet, it is necessary to focus on two issues related to the rights of the individual:

- cases where an individual, businessperson, or legal entity violate the requirements of legislation on water protection zones, resulting in remedial actions. This raises the issue of legal defenses.
- cases where natural objects in a water protection zone or a protective shorelines are polluted and destroyed by others. This requires an examination of what individuals can do to defend their right to a healthy environment, as declared in the RF Constitution (Article 42)

In the first situation, as mentioned above, various remedial measures (administrative penalties, civil liability, or criminal liability) are instituted against individuals and legal entities that have violated the legal requirements regarding water protection zones and protective shorelines. If an individual, a businessperson, or a legal entity does not agree with the remedies taken against him/her, he/she can appeal to the court or commercial court. For instance, resolutions of the public institutions controlling the use and protection of natural resources can be reviewed in the court. Appeals of justice against awards of the courts can be initiated through cassation or supervision; and those appeals against awards of the commercial court can be initiated by lodging a complaint. The appeal procedures are set forth in the Civil Code of Practice of the RF (CCP) and the Arbitration [Commercial] Code of Practice of the RF (ACP).

An individual may successfully nullify an act of a public or local authority which violates the rights or legitimate interests of the individual through illegal actions (omissions) by the officials who provide public control over the use and protection of natural resources in water protection zones. This may result in the recompense of damages for losses caused to landowners, land users, and lessees (including the individual).

Court proceedings may be either based on claims that are filed (Section II.1.CCP) or appeals that are made (Section II.2, Chapter 24, CCP).

Individuals and their dependents file claims in the courts of common law (Articles 4, 25 CCP). However, legal entities and individuals who carry out entrepreneurial operations without creating a legal entity (individual entrepreneurs), apply to commercial courts (Articles 2, 22 ACP). In applying to the court, one should take into ac-

count the rule of jurisdiction. The law stipulates that, by its general rule, claims should be filed at the registered residence of the defendant(s) (Article 117, CCP, Article 25, ACP of the RF). If a defendant is a legal entity, then the claim is filed where its property is located. In the event of claiming damages, there is a possibility for a plaintiff to select jurisdiction, for example, either at the location of the plaintiff, or at the site where the damage occurred.

Complaints against actions of public authorities may be filed at the courts, however, they can also be filed with a higher official in the established manner. For instance, a decision made by an official of the controlling authority on violation of legal provisions regarding water protection zones, may be subject to appeal sent by the individual or legal entity affected by this, within 10 days, to an official higher-ranking committee. If the duration of appeal is missed, due to some valid reason, it can be restored. Based on the appeal review, the following decisions may be taken: the decision can remain intact and the appeal is rejected, it can be repealed (resulting in a closed case), or enforcement measures may be softened.

One can also appeal to the Prosecutor against the finding of an offense that was made by the official from the particular authority. The filed appeal or the prosecutor's protest would suspend implementation of the decision until it has been reconsidered.

In the second situation – defense of the right to a healthy environment – Article 12 of the RF *Law "On Environmental Protection,"* entitles individuals to:

- send their letters, complaints, and applications on environmental protection issues and demand their review;
- demand from relevant agencies submission of timely, complete and accurate information about environmental health, specifically on the

- territory of a water protection zone, and about measures for its protection:
- demand cancellation, either through administrative means or in court, of the decisions on deployment, design, construction, reconstruction, or operation of environmentally harmful facilities including those located in water protection zones, or on restriction, suspension, or termination of the operation of existing enterprises and other facilities that negatively impact the environment and human health;
- take actions against offending legal entities and individuals and claim damages in court, associated with adverse impact on the individual's health and assets caused by the environmental offense.

According to Article 12 of the RF *Civil Code*, civil rights can be protected through court proceedings by:

- nullifying an act of the federal or local authority that violates rights and lawful interests of the individual;
- awarding damages caused to individual's health or assets;

Subsequently, these cases can be reviewed in the courts on the basis of claims (Section II.1 CCP RSFSR) or appeals (Section II.2, Chapter 24, 241 CPP RSFSR). The jurisdiction regulations mentioned above must also be taken into account when taking legal action.

To offer examples of claims presented in the court by individuals, or in the commercial court by legal entities, the include claims to:

• terminate activities that are harmful to individuals' health and assets, the national economy and environment (Under Article 9 of the RF *Law "On Environmental Protection"*);

 compensate damages to individuals' health and assets resulting from the adverse environmental impacts caused by economic and other activities of enterprises, institutions and individuals (Article 90 of the same Law).

The RF Law "On Lodging Complaints to the Court against Actions and Decisions that Infringe on Rights and Freedoms of the Individuals," dated 28 April 1993, grants citizens the right to appeal to the court against any acts⁴ (both regulatory and others) as well as actions (or omissions) by state authorities, local governments, public organizations (as well as against the officials) that violate their rights and lawful interests, particularly their right to a favorable environment. According to this Law, the right to appeal does not depend on whether appeals were filed against these acts or actions (or omissions) in the past.

The appeal should be specific, indicating a certain concrete right of the individual that has been violated by acts or actions (or omissions) by the named bodies or officials. It should express a clear request to regard the appeal as justified and consider the act unlawful and actions wrong. There is a very important point reflected in the existing legislation of practice: the individual is relieved of the responsibility to prove unlawfulness of the appealable decisions or actions (or omissions). They should only prove the fact that their freedoms and rights have been violated. It is a procedural duty of the defendant who should prove, using documents, the legitimacy of the decisions or actions (or omissions).

An individual may appeal to the court against the refusal of a body to provide information about, for instance, environmental health. The individual may request the court to obligate the defendant to furnish

this information. A subject of the appeal to the court may be the statement made by environmental experts upon their inspection, if its conclusions can lead to the infringement on the rights of a person to a favorable living environment.

The individual's rights, more specifically the right to a favorable environment and the right to accurate information about its condition, can be defended not only through court proceedings, but also through administrative examination. As mentioned above, individuals may submit their letters, complaints, and applications to state authorities, local governments, or other official bodies. The total term for reviewing applications and complaints issued by the individual is one month. The applicant should be informed of the decision taken, and, if the decision is negative, the reply should be in writing.

The method of application is not regulated by law. However, an application or complaint should be signed and the applicant's full name and place of residence or work should be indicated. Otherwise, the application will be considered anonymous.

The RF Law "On the Fundamentals of the Civil Service" (1995) provides that the duties of civil servants include a timely examination of the appeals of the individuals and a decision to be made with respect to the individual's well-being. The civil servants further bear responsibility for their actions or omissions that lead to violations of rights and interests of the citizens (Article 10, Article 14). A complaint is sent in compliance with the principle of affiliation, i.e. to the state authority or official delegated to take a substantive decision in order to cancel an illegal act, stop illegal actions of the officials, or the civil servants under him.

Here is a brief statement on the relationship between the branches of power and their subordination. The act of a representative or executive power authority can be repealed, on the grounds of illegality or

^{[4 &}quot;Acts" in this context refers to official rules, regulations, or other decisions issued by administrative agencies.] [editor's note]

feasibility, by this authority itself. Higher executive authorities may cancel decisions of the bodies of special competence. More specifically, the Government of the RF has the right to cancel acts of its affiliated administration bodies (ministries, committees, and agencies). The Governors of the subjects of the federation may cancel acts (ordinances) of the bodies and structural divisions within its administration. bodies of special competence (ministries, committees, agencies) may also cancel the ordinances of their subordinate bodies. The Russian State Committee on Environmental Protection, for example, may cancel an ordinance of an oblast environmental protection committee. The principal public sanitary inspector of the oblast may cancel an ordinance of the principal public sanitary inspector of the city or region.

Since there is actually no subordination within the local government, their acts may not be canceled through subordination channels. Decisions of the local governments or officials can be repealed by the governments or officials themselves or they may be nullified on the grounds of a court judgment (para. 2, Article 44 of the RF *Law* "On General Principles for Organization of Local Government in the Russian Federation").

If a violation of legal provisions on water protection zones result in violations of the rights of individuals, they may seek redress through the prosecutor's offices. The prosecutor's office may protest against the legal acts of various state authorities or local governments that contradict the law; present a declaration on the removal of the violation, due to violations and conditions enabling them to commence a case; institute a criminal case; institute an administrative proceedings; or file a claim in the court.

If the violations of the legal provisions on water protection zones result in personal, property, or moral damage to the individual, and the violation has the signs of a crime, the individual is entitled to apply,

either in writing or verbally, to the inquiry bodies (militia, commanding officers of the military units, etc.), investigation bodies, prosecutor's offices, or the court to institute criminal proceedings. The prosecutor, investigator, an inquiry body, and a judge must, in compliance with the law of criminal procedure, accept applications and information about each crime that was committed or attempted and formulate a decision within the time established by law. Regarding information and applications, either a decision on instituting or refusing a criminal proceeding is made or, a decision on communicating this information or application to a respective investigation or jurisdiction authority is considered.

8. Getting Legal Advice

As a rule, one should apply to the official authorities (the court, prosecutor's office, and administration) with a specific complaint. However, before doing so, it is advantageous to understand exactly what your rights and obligations are, where your rights have been violated, and which regulatory acts you should cite. You should also formulate your complaint in the proper format. These components will guarantee a prompt review of your matter in your favor. A question arises, however, who or what may help with this?

Or another situation – there is no apparent conflict and your rights are not being infringed upon – you are simply curious about a particular issue. Obviously you cannot go to the court with a simple question. What is advised in this case?

This section elaborates on how you may obtain legal information.

It is no secret, that the flow of legal information in our country leaves much to be desired. Legal advice is expensive, although sometimes it is less than what you may lose if you lose your case. Still, there are ways to obtain information. They are discussed below.

It is commonly claimed that everyone is an expert in medicine and law. However, if we want to obtain true legal information or advice, it is imperative that we seek a qualified lawyer in the same way that we would seek a certified doctor if we desired medical treatment. However, there is another way. Presently, there are a sufficient number of newspapers and magazines where environmental and legal issues are published. One may search for an answer in these publications or send their question directly to their editorial staff who would seek out the advice of specialists in order to publish a reliable answer. In the Istra region, there is yet another method: you may send

your questions to the Public Environmental Council.

However, before we discuss possible ways of obtaining the information, it is necessary to offer a few practical recommendations.

1. If you are planning to address a specific legal issue, it is vital to insure the following.

First, make sure that your question has been formulated in a proper manner. Of course, an experienced lawyer would be able to identify the crux of the matter, but it is more efficient if he does not allocate too much time to attempting to discover the substance of your question. In order to achieve this, you must understand the following: you should be as thorough as possible with your attempt to describe accurately the place of occurrence, those involved, and, if your question relates to a site, everything you know about its location, ownership, and history.

For example, suppose you are interested if a farm is located within the boundaries of the water protection zone. To obtain an accurate answer, you must define the river, the adjacent lands, and the distance of the farm from the bank of the river. Another example: suppose a road or a factory is going to be constructed in close vicinity to your property and you are not sure if this is legal. It may be beyond your capabilities to specify much of the information. However, you may be able to describe the site where the construction is performed, measures taken to construct the facility, work undertaken, the purpose of the constructed facility, and the construction agency. This information may be quite necessary to give an accurate answer.

2. If your question deals with a potential violation of your rights, you should

attach copies of the documents that confirm your rights (for instance, a land title) as well as the documents (if they are available) which, in your opinion, infringe on your rights. For instance, a notice about the administration's resolution to lay a pipeline across your plot of land.

If you wish to obtain additional information involving your participation during or after the court proceedings, it is necessary to submit court documents (or their copies) that are available to you. They may include the documents you presented to the court or the court's award.

These recommendations are quite simple but sometimes they are overlooked. The lawyer needs information, as accurate and complete as possible, in order to give you the most accurate and complete answer to your question.

3. If you are attempting to find answers in literature, you should also be quite aware of the contents of your question so that you can easily find the necessary publication. Publications with legal information will be discussed later in this paper. Finally, when you are in need of books or periodicals, utilize the current publications to the fullest. Laws in our country change rapidly, so old materials, even those published half a year ago, may contain information that is already outdated.

Now, let us focus on the main topic: where to obtain the answer to your question:

- 1. The most efficient way is to apply to the nearest consulting law firm. There will be several lawyers on duty who consult with people on various legal issues, including environmental issues, daily
- 2. It is possible to obtain advice of a lawyer who specializes in environmental law. Such consultation may happen to be more costly but its return (advice of a skilled specialist who deals with environmental law

on a continuous basis) is much more effec-

In Moscow, for instance, there is a consulting firm, "Regional Public Center for Environment and Legal Protection," which employs environmental lawyers.

You may apply to the Institute of Law attached to the Government of the RF where leading specialists in law are employed. This institute is involved in legislative research and its employees, including those who specialize in the environmental law, consult with a whole range of individuals. This is done through the Contractual Division of the Institute where you can address your question.

3. As mentioned above, the Istra region set up the Public Environmental Council specifically designed to help the community in resolving environmental issues.

If you lack sufficient funds or you are unable to visit a specialist directly, you can attempt to seek assistance from members of this Council. Actually, each district has members on this Council and officials of local administrations who deal with environmental issues are well aware of its work.

- 4. For sometime now, the Istra region has been practicing the "open doors days for environmental questions." They are arranged by the region administration and information about their arrangement is disseminated quite broadly. During these days, you have an additional opportunity to obtain needed information from a specialist or an administration employee.
- 5. Finally, a word regarding publications in which you can address your questions. These are, of course, newspapers and magazines that specialize in ecology and law. Many process letters from their readers. A legal matter, even of an environmental nature, can be addressed to a publication dealing with legal issues since these

publications are frequently circulated among lawyers. If you have doubts as to whether this magazine or newspaper would reply to your question, you may simply phone the publishing house (phone numbers are usually printed in each issue) and inquire whether or not they accept letters. Below are some of the major legal publications in Moscow:

Legal Magazines:

Khoziajstvo i zhizn (Economy and Life)
Zakonodatelstvo i ekonomika (Law and Economy)
Zakon (Law)
Yuridichesky mir (Juridical World

Legal Newspapers:

Domashny advokat (Domestic Lawyer) Yuridicheskaya gazeta (Juridical Newspaper)

Most of these publications are available through in the regional library.

Attachments

Decree of the Government of the Russian Federation

dated November 23, 1996, # 1404, Moscow

On confirmation of Regulation on water protection zones of water bodies and their riparian protective strips [protective shorelines]

The Government of the Russian Federation **decrees**:

- 1. Confirm the enclosed Regulation on water protection zones of water bodies and their riparian protective strips.
- 2. Make void the Decree of the Council of Ministers of the RSFSR 17 March, 1989 # 91 *On confirmation of the Regulation on water protective zones (strips) of rivers, lakes and reservoirs in the RSFSR* (SP RSFSR, 1989, #9, article 46).

Chairman of the Government of the Russian Federation V. Chernomyrdin

REGULATION OF WATER PROTECTION ZONES OF WATER BODIES AND THEIR RIPARIAN PROTECTIVE STRIPS

1. A water protection zone is a territory adjacent to a river, lake, reservoir, or other surface body of water where a special regime of economic, legal and other activity is established in order to prevent pollution, clogging, depletion and silting of the water bodies, as well as to promote habitat conservancy.

Attention to the special regimes established within water protection zones is an integral part of conservation projects for the protection of hydrological, water chemical, hydrobiological, sanitary, and ecological properties of bodies of water and for the improvement of their riparian territories.

Within water protection zones, there are established riparian protective strips, where additional restrictions on the use of nature are introduced.

2. The area and the borders of water protection zones and riparian protective strips are determined by physiographic, soil, hydrological, and other conditions, including changes in the water banks. These are confirmed by the executive bodies of the territories of the Russian Federation following a proposal by territorial water management organizations and the Ministry of Natural Resources of the Russian Federation in agreement with specially authorized state bodies of environmental protection, sanitary inspection, and the frontier guard of the Russian Federation within their jurisdiction.

The width of a water protection zone and a riparian protective stripe is calculated based on:

- for rivers, bayous and lakes average annual bank line by normal headwater level;
- for seas peak tide level;
- for swamps their border (zero depth of turf deposit).

• for swamps at river heads, as well as for other swamps influencing watershed yield, water protection zones are established at adjacent territories.

Minimal width of a water protection zone of a river depends on the distance from the river head:

0-10 km	— 50 m
10-50 km	— 100 m
50-100 km	— 200 m
100-200 km	— 300 m
200-500 km	— 400 m
500 km and more	— 500 m

For the head of a river the minimal radius of water protection zone is 50 m or more. Minimal width of a water protection zone of a reservoir or a lake depends on its area:

 $\begin{array}{ccc} \text{0-2 sq. km} & -300 \text{ m} \\ \text{2 sq. km and more} & -500 \text{ m}. \end{array}$

When evaluating the minimal width of water protection zones which influence outflow of streams, the same principles as to lakes and reservoirs are applied.

The minimal width of water protection zone of a river for which an exclusion forest stripe for spawning area protection is established equals the width of this stripe.

The borders of water protection zones of main and branch canals coincide with the borders of right-of-ways of these canals.

Sizes and borders of water protection zones at the territory of cities and other settlements are established by taking into account specific characteristics of city planning and development in accordance to confirmed master plans.

For lengths of rivers closed in manifolds no protective zones are established.

4. Minimum widths of riparian protective strips for rivers, lakes, reservoirs and other bodies of water are set as follows:

Types of Areas with	Widths of riparian protective strips (in meters) according to the steep-					
Economic signifi-	ness of the slope of the adjoining territory					
cance, adjoining a	Inverse and zero slope	Slope up to 3 decrees	Slope greater than 3			
body of water			degrees			
Plowed fields	15-30	35-55	55-100			
Meadow, hayfield	15-25	25-35	35-50			
Forest, shrubbery	35	35-50	55-100			

The width of riparian protective strips of water bodies which have outstanding fishing importance (spawning, wintering and nutrition areas) is 100 meters or more dependent on the grade and characteristics of adjacent lands.

The width of riparian protective strips of seas and mountain rivers is established individually for each specific case according the procedure described in Articles 2 and 3 of the present Regulation.

A riparian protective stripe border can be superimposed with quay parapet in cities and other settlements if these entities have storm collectors and quays.

5. Development of water protection zones and riparian protective strips is carried out according to normative and technical legal authorities approved by the Ministry of Natural Resources of the Russian Federation in agreement with specially authorized state bodies of environmental protection.

Basin and other territorial organizations of water management and protection are charged with the development of water protection zones and riparian protective strips, except those of reservoirs in private use. For reservoirs in private use, water users are charged with the above function.

Executive bodies of the subjects of the Russian Federation confirm drafts of water protection zones after proposals by basin and other territorial bodies of water management under the Ministry of Natural Resources of the Russian Federation.

Legislation of the Russian Federation determines the procedure of expert examination, including ecological examination, and the procedure for reaching agreement concerning draft projects of water protection zones.

Basin and other territorial organizations of water management and under the Ministry of Natural Resources of the Russian Federation mark with special water protection signs of the established standard in the fields borders of riparian protective strips of water bodies (except that of reservoirs in private use), which have been provided by draft projects.

Before confirmation of draft projects of water protection zones executive bodies of the subjects of Russian Federation and other territorial bodies of water management and protection of the Ministry of natural resources of the Russian Federation shall establish a minimal area of water protection zones and riparian protective strips. These are indicated on master plans of development of cities and other settlements, plans of land-use, other maps and cartographic documents.

The public must be given notice of the established procedure on the demarcation of borders of water protection zones and riparian protective strips and on the regime of economic and other activity within these territories.

- 6. Within water protection zones, it is prohibited to:
 - carry out air-chemical works, that is, works connected with the aerial dusting of chemicals;
 - apply chemicals to kill pests, weeds and to fight crop illnesses;
 - use manure;
 - install deposits of chemicals, fertilizers, gas welding materials; places for filling equipment with pesticides and weedkillers; stock farms; burials of industrial, communal and agricultural waste; cemeteries and cattle-burials, sewage ponds;
 - store manure and waste;
 - wash, fuel and repair cars and other vehicles and machines;

- develop dacha settlements if water protection zone is 100 meters or less in width and the steepness of its slopes is 3 degrees or more;
- install parking, including parking at the territory of dachas;
- carry out main felling;
- build or re-build buildings, devices, communications and other objects as well as build mines and carry out digging without permissions of the basin or other territorial body of water management and protection of the Ministry of natural resources of Russian Federation.

In dachas located within water protection zones, one must follow rules and regulations on the use of these dachas. The rules and regulations prevent pollution, clogging, depletion and silting of the water bodies.

On the territory of water protection bodies, it is allowed to carry out improvement thinning and take other measures of forest management, if these measures are protective for water bodies.

- 7. Within riparian protective strips, in addition to the restrictions mentioned in clause 6 of the present Regulation it is prohibited to:
 - plow fields;
 - use manure or fertilizers;
 - store or dump eroded soil;
 - graze cattle and keep cattle in summer camps (except for use of traditional watering places), create cattle bathing places;
 - construct stationary seasonal tent camps, allocate land lots to be used as dachas or for building purposes;
 - drive cars and tractors, except vehicles of special functions.

Land lots within riparian protective strips could be allocated for objects of water supply, recreation, fishing, technical devices if one has a license containing requirements of water protection regime.

Riparian protective strips generally must be covered with trees, bushes or grass.

8. Water-users are responsible for maintaining water protection zones, riparian protective strips and water protection signs in the proper condition. Owners, landholders and land-users of lots located within water protection zones and riparian protective strips are obligated to follow the established regime of use of these zones and strips.

The establishment of a water protection zone does not involve the withdrawal of lots from landowners, landholders and land-users or the prohibition of landed estate business, except in cases provided by the law.

At the frontier territory, executive bodies of the subjects of the Russian Federation after proposal by basin or other territorial bodies of water management and under the Ministry of Natural Resources of the Russian Federation in agreement with the bodies of frontier guard of the Russian Federation and specially authorized state bodies of environmental protection within their jurisdiction establish a regime of use of water protection zones and riparian protective strips.

- 9. Persons guilty of violating the use regime in water protection zones and riparian protective strips bear liability according to the current legislation.
- 10. The present Regulation does not nullify regulations and other normative acts on zones of sanitary protection of sources of community drinking water supply, on exclusion of riparian forest strips, and on other protective zones of water bodies established in accordance with the legislation of Russian Federation.

When establishing zones of sanitary protection of sources of communal and drinking water supply, area and regime of usage of these zones is determined by regulations and standards.

11. Executive bodies of the subjects of the Russian Federation, basin and other territorial bodies of water management and under the Ministry of Natural Resources of the Russian Federation, specially authorized state bodies of environmental protection, land management and conservation, forestry management within their jurisdiction are charged with duty to enforce adherence to the procedure of establishing areas and borders, as well as usage regimes of water protection zones and riparian protective strips.

Water Code of The Russian Federation

Part IV. Use and Protection of Water Sites, Articles 94 -118

Chapter 11. Prtoection of Water Sites

Article 94. General Requirements to Protection of Water Sites

Government authorities of the Russian Federation and government authorities of subjects of the Russian Federation take measures to protect water sites, prevent their contamination, littering, and depletion and to eliminate consequences of the said phenomena, in accordance with legislation of the Russian Federation and in coordination with the steady development principle.

Individuals and legal entities are required to conduct industrial, technological, melioration, agricultural, technical, hydro-technical, sanitary, and other activities while utilizing water sites, which facilitate water sites protection.

Water sites utilization should be conducted with minimum negative consequences for water sites.

Article 95. Protection of Water Sites from Contamination

In the interest of prevention and elimination of water sites contamination the sources of contamination are determined.

Sites which perform disposal or other introduction of harmful substances into water sites which deteriorate quality of surface and underground waters and limit their utilization and negatively affect the condition of water sites' bottom and shores are recognized as sources of contamination.

Water sites are protected from contamination through regulation activities of stationary and other sources of contamination.

Federal executive authorities and executive authorities of subjects of the Russian Federation provide protection of water sites from all types of contamination, including diffusive contamination (contamination through the land surface and air)

Article 96. Protection of Water Sites for Littering

Discharge and burial of industrial, residential and other waste in water sites is prohibited.

Introduction of suspended particles into water site is allowed only in accordance with requirements of water legislation of the Russian Federation.

Article 97. Accidental Contamination of Water Sites

Accidental contamination of water sites occurs during a sudden harmful substances disposal into surface or underground water sites which causes damage or creates danger of damage to human health, normal economic activities, and biological variety.

Actions for prevention and elimination of water sites accidental contamination are determined by water legislation of the Russian Federation and the earth's interior legislation of the Russian Federation.

Article 98. Protection of Water Sites from Contamination and littering of water sites above the established limits of effect on water sites.

Compliance with the requirements of the first part of the present article is facilitated by priority technology application which do not affect natural environment negatively and by restriction of utilization of toxic substances and heavy metals and implementation of scientifically proven measurement methods for sewage disposals into water sites and contamination of atmosphere.

Article 99. Protection of Water Sites from Contamination and Littering Caused by Activities on the Bottom of Water Sites.

Minerals and turf extraction from bottoms of water sites or construction of facilities with bearings on the bottom of water sites should be implemented in such ways which do not negatively affect water sites' surface waters, the bottom, shores, and water biological resources.

For utilization of the earth's interior that does not involve minerals extraction, the earth's interior users are required to avoid contamination, littering, and depletion of water sites.

Article 100. Protection of Water Sites from Contamination by Vessels and other Devices and Constructions Used on the Surface of Water Sites

Operation of self-propelled and non-self-propelled vessels and other craft on the surface of water sites is prohibited without devices for collection of sewage, waste, and refuse from such vessels and craft.

Article 101. Protection of Ice Covers on Water Sites, Glaciers and Snow Massifs from Contamination and Littering

Littering of ice covers on water sites, glaciers, and snow massifs by industrial, residential, and other waste and refuse, and contamination by oil products, chemical pesticides, and other harmful substances are prohibited.

Ice collection should not affect condition of water sites and result in depletion of surface and underground waters reservoirs.

Article 102. Protection of Reservoir Areas of Water Sites

Reservoir areas of water sites are subject to protection from contamination and littering in accordance with the procedure established by the government of the Russian Federation.

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Article 103. Protection of Water Sites from Contamination by Chemical Pesticides and Other Chemical Substances

Application of chemical pesticides and other chemical substances is allowed only in the event that it does not affect the condition of water sites and water biological resources.

Article 104. Protection of Water Sites from Contamination by Radioactive Toxic Substances (Materials)

Content of radioactive and toxic substances (materials) in water sites should be maintained on the level that does not result in damage to human health and natural environment.

Burial and disposal of radioactive and toxic substances (materials) in water sites are prohibited.

Discharge of sewage containing toxic substances (materials) in water sites is allowed only upon their purification in accordance with the established procedure.

Explosive activities that involve nuclear or other types of technology and disposal of radioactive and toxic substances are prohibited.

Government control of the level of water sites contamination by radioactive and toxic substances (materials) is conducted the specially authorized bodies of the Russian Federation

Article 105. Allocation, Design, Construction, Reconstruction and Operation of Economic and Other Sites Which Affect the Condition of Water Sites

Allocation, design, construction, reconstruction, and operation of economic and other facilities which affect the condition of water sites, as well as implementation of new technological processes should be conducted with concern to how it affects the condition of water sites and natural environment.

Locations of construction (allocation) of economic and other facilities which affect the condition of water sites are determined in coordination with the specially authorized government administration body for water fund utilization and protection, the specially authorized government administration bodies for natural resources utilization and protection, and the government authority of sanitary and epidemic inspection, in accordance with legislation of the Russian Federation.

For design and construction of renewed and reconstructed economic and other facilities, as well as for implementation of new technological processes which affect the condition of water sites, it is necessary to provide for formation of closed technical water supply systems.

Design and construction of direct technical water supply system are not permitted, as a rule. Design and construction of direct water supply system are not permitted, as a rule. Design and construction of such systems are allowed in exceptional cases, upon a positive conclusion by the state inspection concerning the pre-project and project documentation and the state ecological inspection.

Operation of the following sites is prohibited:

- economic and other facilities, including filter storage, waste burials, urban and other landfills, not equipped with purification device which prevent contamination, littering and depletion of water sites and harmful water impact:
- water collection and disposal facilities, without devices for fish protection and devices which facilitate accounting for collected and dropped-off waters;
- livestock farms and other manufacturing facilities, without purification devices and sanitary protection zones;

- irrigation, watering and drainage systems, water reservoirs, dams canals and other hydrotechnical facilities, without fish protection devices and devices for flood and fish admission;
- water collection facilities using underground waters, not equipped by water regulation and water accounting devices;
- water collection and other hydro-technical facilities, without establishing sanitary protection zones and setting up posts for observation of water sites condition indicators; and
- facilities and devices for oil, chemical and other products transportation and storage, not equipped with devices for prevention of water sites contamination and measurement devices for leakage control of the indicated products.
- operation of sewage irrigation facilities is prohibited without setting up posts for observation of water sites condition indicators.

Prior to water reservoirs operations, measures of the bed preparation for flooding take place.

The government of the Russian Federation and executive authorities of subjects of the Russian Federation make decisions concerning prohibition of operation of economic and other facilities, in accordance with the procedure established by legislation of the Russian Federation.

Article 106. Operation of Economic and Other Sites Which Affect the Condition of Water Sites

For operation of economic and other water sites which affect the condition for water sites, individuals and legal entities are required to take measures to prevent contamination, littering, and depletion of water sites and harmful water effect.

During operation of economic and other facilities it is prohibited to:

- dispose sewage which was not purified and neutralized in accordance with the established standards, into water sites.
- collect water from water sites if it essentially affects their condition;
- dispose sewage which contains substances with no established maximum allowed concentrations, or infectious pathogenic organisms.

Violation of requirements for water sites rational utilization and protection results in restriction, suspension, or prohibition of operation of economic and other facilities which affect the condition of water sites.

Restriction, suspension, or prohibition of utilization of economic or other facilities that affect the condition of water is performed by the government of the Russian Federation and/or executive authorities of subjects of the Russian Federation, based on a statement by the specially authorized government administration bodies for natural environment protection, and the government authority for sanitary and epidemic control.

Article 107. Characteristics of Protection of Underground Water Sites

Individuals and legal entities whose activities cause or may cause damage to the condition of underground water sites should take measures to prevent contamination, littering, and depletion of water site and harmful water impact.

Allocation of waste burials, land-fills, cemeteries, cattle burial grounds, and other sites which affect the condition of underground waters is prohibited on water reservoirs areas which are used or may be used for drinking and household use water supply.

Sewage irrigation of soils is prohibited if it affect the condition of underground water sites.

Construction and operation of bore-holes, as well as utilization of spent minerals extraction sites for sewage and drainage waters collection, are allowed in compliance with the requirements provided for in the present Code and the earth's interior legislation of the Russian Federation.

Bore-holes, including self-pouring and test wells, as well as non-operational bore-holes are subject to equipment with regulation devices, conservation, and elimination in accordance with the established procedure.

If water-carrying levels are discovered in the process of earth's interior utilization, it is necessary to take measures to protect underground water sites in accordance with the established procedure and inform local authorities, the specially authorized government administration bodies for natural environment protection, the government administration body for the earth's interior utilization and protection, and the specially authorized government administration body for water fund utilization and protection.

Underground water removal in allowed during minerals extraction, water level reduction activities, facility construction and operation of water drainage systems on meliorated lands, with a water utilization license.

For allocation, design, construction, start of operation, and operation of water collection facilities which involve utilization of underground water sites, it is required to take measures to prevent their harmful impact on surface water sites and natural environment.

Article 108. Procedure of Activities on Water Sites and Their Water Protection Zones

Construction, dredging, explosive, and other activities on water sites and their water protection zones are conducted in coordination with the specially authorized government administration body for water fund utilization and protection.

The procedure of utilization of minerals and other resources that are extracted during activities on water sites is determined by executive authorities of subjects of the Russian Federation.

Article 109. Standards of Maximum Allowed Harmful Influence on Water Sites

Maintenance of surface and underground water in compliance with ecological requirements is facilitated by establishment of standards of maximum allowed harmful influence on water sites.

Standards of maximum allowed harmful influence on water sites are established by the environment protection legislation of the Russian Federation and water legislation of the Russian Federation.

Standards of maximum allowed harmful influence on water sites are established based on:

• maximum allowed value of anthropogenic load which does not change the ecological system of water site during extended influence; and

• maximum allowed mass of harmful substances which may be introduced in a water site, or its water collection area.

Standards of maximum allowed disposal in water sites are established based on prohibition to exceed maximum allowed concentrations of harmful substances in water sites.

Standards of maximum allowed concentrations of harmful substances in water sites and sewage are established based on the purpose of the water site utilization.

The procedure of development and approval of standards of maximum allowed harmful influence on water sites is established by the government of the Russian Federation.

Article 110. Requirements to Ecological Discharges and Standards of Maximum Allowed Irrevocable Surface Waters Removal

In the interest of water sites maintenance in compliance with ecological requirements, water disposals from water reservoirs are conducted and the volume of irrevocable surface waters removal is established.

Ecological disposals and volumes of irrevocable surface waters removal are determined for each water site by the specially authorized government administration body for water fund utilization and protection, together with specially authorized government administration bodies for natural environment protection in accordance with the procedure established by the government of the Russian Federation.

Satisfaction water users' needs of water resources by means of ecological disposal is not allowed.

Article 111. Water Protection Zones of Water Sites

Water protection zones are established for maintenance of water sites in compliance with ecological requirements, prevention of contamination, littering, and depletion of surface waters and preservation of habitat for fauna and flora.

A water protection zone is the area adjacent to the water reservoir of water site which is provided for special utilization and natural resources protection and other economic activities.

Coastal protection strips are established within limits of water protection zones. Land tillage, trees felling and stubbing, livestock farms and camps location, and other activities are prohibited in the coastal protection strips, except for cases provided for in the present Code.

Water supply facilities, recreation, fishing, and hunting are allowed in coastal protection strips, as well as water collection, port and hydro-technical facilities with a water utilization license.

The procedure of establishment of size and borders of water protection zones and their coastal protection strips and the procedure of their utilization are established by the government of the Russian Federation.

Water protection zones of water sites which are drinking water sources of locations of fish spawning are declared the specially protected areas, in accordance with the procedure established by the government of the Russian Federation.

Article 112. Characteristics of Ownership for Land Plots in Water Protection Zones and Control of Their Utilization

Land plots in water protection zones are provided to individuals and legal entities in accordance with the procedure established by the land law of the Russian Federation, in coordination with the specially authorized government administration body for water fund utilization and protection.

Government control of utilization and protection of natural resources, and other economic activities of individuals and legal entities in a water protection zone is conducted by executive authorities of subjects of the Russian Federation, the specially authorized government administration bodies for water fund utilization and protection, the specially authorized government administration bodies for natural environment protection, the government administration authority for land utilization and protection, and the especially authorized government forestry management body, to the extent of their authorities.

Article 113. Utilization and Protection of Woods in Water Protection Zones of Water Sites

Utilization and protection of woods in water protection zones of water sites are intended to prevent contamination, littering and depletion of water sites.

In the woods of water protection zones and coastal protection strips, felling as a main purpose activity is prohibited. Intermediary felling and other forestry activities which facilitate protection of water sites are allowed.

Woods of water protection zones are provided for utilization in coordination with the specially authorized government administration body for water fund utilization and protection, in accordance with forestry and water legislation of the Russian Federation.

The specially authorized government administration body for water fund utilization and protection controls utilization of woods in water protection zones, and has the right to suspend, or prohibit activities which negatively affect the condition of water sites.

Article 114. Protection of Water Sites During Utilization of the Earth's Interior

During geological studies of the earth's interior, as well as mineral prospecting and extraction, construction, and operation of underground facilities, not related to minerals extraction, users of the earth's interior are required to avoid contamination, littering, and depletion of water sites.

Article 115. Sanitary Protection Zones and Districts

Sanitary protection zones and districts are established for protection of water sites which are utilizes for drinking and household use water supply, and contain natural medicinal resources, in accordance with legislation of the Russian Federation.

Article 116. Ecological Emergency and Ecological Disaster Areas on Water Sites

Water sites, their parts, and water collection areas where economic activities or natural processes result in changes dangerous for human health, fauna, flora, and the condition of natural environment may be declared the areas of ecological emergency or ecological disaster.

Legal procedures concerning the areas of ecological emergency or ecological disaster are determined by legislation of the Russian Federation.

Article 117. Prevention and Elimination of Harmful water Impact

Federal executive authorities, executive authorities of subjects of the Russian Federation and water users are required to take measures to prevent and eliminate consequences of harmful water impact:

- flooding and overflowing;
- destruction of shores, dams, dikes and other facilities;
- swamping and salting of land; and
- soil erosion, creation of ravines, landslides, mountain torrents and other phenomena

In cases provided for by legislation of the Russian Federation, the government of the Russian Federation and/or executive authorities of subjects of the Russian Federation may form special committees for prevention and elimination of consequences of harmful water impact. Decisions of such committees adopted within their competency limits are binding for all individuals and legal entities.

Water users are required to participate in activities directed on prevention and elimination of harmful water impact in cases of natural disasters and accidents on water sites. The indicated activities are conducted in coordination with the specially authorized government administration body for water fund utilization and protection and local authorities.

Article 118. Specially Protected Water Sites

Specially protected water sites are the natural water ecosystems which have special environmental, scientific, cultural, esthetic, recreational, and health care significance. Specially protected water site are removed from economic activities entirely or in part, permanently or temporarily, based on decision of appropriate executive authorities and a written statement from the specially authorized government administration body for water fund utilization and protection and the specially authorized government administration body for natural environment protection.

Specially protected water sites may be recognized as specially protected water sites of federal, territorial (regional), or local significance.

A specially protected water site may be a separate specially protected natural area of a part of a specially protected natural area which is determined by legislation of the Russian Federation.

The government of the Russian Federation and executive authorities of subjects of the Russian Federation may establish the following categories of specially protected water sites:

- sections of internal sea waters and the territorial sea of the Russian Federation:
- ware and swamp areas;
- water currents and reservoirs recognized as unique natural landscape;
- areas of water sites' source and estuary protection;
- locations of spawning of valuable types of fish; and
- other categories of water sites regarded in the general system with woods, fauna, and other natural resources which are subject to special protection.

Legislation of the Russian Federation may provide for other categories of specially protected water sites.

Specially protected water sites which are federal property, and a part of unique natural environment may be utilized and protected in accordance with federal law.

Utilization and protected of specially protected water sites is conducted in accordance with legislation of specially protected areas of the Russian Federation.

Part V. Settlement of Disputes regarding the Use and Protection of Bodies of Water and Liability for Violation of the Water Legislation of the Russian Federation, Articles 129 -132

Chapter 13. Settlement of Disputes Related to Issues of Use and Protection of Bodies of Water.

Article 129. Procedure of Settlement of Disputes Related to Issues of Water Sites Utilization and Protection

Disputes related to utilization and protection of bodies of water are settled by a court of law, commercial court, or commercial tribunal in accordance with the procedure established by legislation of the Russian Federation.

Right to water sites utilization are defended by administrative means only in cases provided for by federal law. Administrative decisions may be appealed in a court of law.

Chapter 14. Penalty for violation of Water Legislation of the Russian Federation

Article 130. Administrative and Criminal Penalty for Violation of Water Legislation of the Russian Federation

Persons guilty of violation of water legislation of the Russian Federation face administrative and criminal penalty in accordance with legislation of the Russian Federation.

Fines for administrative offense are collected by officials of the specially authorized government administration body for water fund utilization and protection, within limits of their competency established by legislation of the Russian Federation.

Fining does not release the guilty persons form the obligation of correction of violations and the damage compensation.

Article 131. Penalty of Individuals and Legal Entities for Causing Damage to Water Sites

Individual and legal entities involved in causing damage to water sites provide compensation voluntarily or according to a court of law or commercial court decision, in accordance with the methods of calculation of damages caused to water sites, or, in the event of lace of methods, in accordance with the actual cost of water sites renewal, taking into account opportunity costs.

The specially authorized government administration body for water fund utilization and protection, specially authorized government administration body for natural environment protection, the

government authority of sanitary and epidemic inspection, are authorized to bring claims of compensation of damage caused to water sites as the result of violation of water legislation of the Russian Federation.

Payments for damages collected in accordance with a court of law or an commercial court decision are transferred to the federal budget or budgets of the subjects of the Russian Federation, in accordance with the established procedure, and are utilized for water sites renewal.

The conditions and procedure of compensation of damage caused to water sites as the result of violation of water legislation of the Russian Federation are regulated by legislation of the Russian Federation.

Article 132. Invalidity of Agreements Entered Into by Violation of Water Legislation of the Russian Federation

Agreements entered into by violation of water legislation of the Russian Federation are void.