# Chapter 9
# Russia: Historical Dimensions of Water Management

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**Abstract** Analyzing Russian socio-economic issues from a long-term perspective is justified by the major problems that will have to be faced in the future. Such an analysis discloses that Russian water management is regulated not only by rules of law, but also by the behavioural norms of the Russian economic system. Therefore, problems in Russian water management cannot be solved merely through changes in water law and management tools alone. The major problem is that Russian economic and administrative structures were seriously deformed. In order to address the problems facing Russia successfully, a deep understanding of long-term changes in their historical context and of the problems caused by inert institutions created at earlier stages is necessary. This chapter provides an overview of these problems and suggests possible solutions.

**Keywords** Communism • informal practices • markets • property • water law • water management

## 9.1 Introduction

Russian institutional structures for water management are dynamic, with many significant changes in water law and water management over the past century. The changes began in the pre-Soviet period, continued through the Soviet period, and are now in the post-Soviet period. A new Water Code (1995) came into effect more than a decade ago, but positive results are still rather negligible. The major focus of this legislation was on the short-term aspects dealing with how a rational system of water management could be shaped, what instruments will reduce water pollution, and how to increase the contribution of pollution fees to the state budget. This focus left important matters unattended: long-term changes in water law and in organizational forms of water management; factors defining the emergence, evolution, and decline of forms of water management and their interaction with political, social, and economic

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systems; changes in water policy, etc. Long-term changes in water management institutions in Russia can be a source for generalizations about the capabilities of political and economic regimes to promote change in water management.

A closer long-term look at Russian water management discloses a striking contrast between informal practices and formal regulations. Another important characteristic of Russian water management made evident by the long-term approach is the lack of universal practices, common to all strata of society. For example, the general public believes that access to waters should be open and free of charge. The elite have their own patterns of informal behaviour corresponding to their interests. The main result of such conflicts is paralysis of some water management tools. Only a long-term, historically sensitive exploration of these issues will allow a full understanding of where Russian water law and policy stands today, how it reached that position, and possibly where it needs to go in the future.

This chapter considers water legislation and water management in three specific periods: the pre-Soviet period (before 1917), the Soviet period (1917–1990), and the post-Soviet period (from 1991). The last period can be further divided into two sub-periods. The first centres on the Water Code of 1995 and the problems that arose during implementation of the new norms and regulations. The second sub-period started on 1 January 2007, when a new Water Code came into effect. This last will be an analysis of the future as there is not yet much experience with the new Water Code. It is possible, however, to forecast the dynamics of the predictable conflict between informal practices and legislation. That conflict already manifested itself during the previous periods and has left its legacy for the new Code. This analysis includes not only identification of specific water management trends in each period, but also identification of interconnections between various water management bodies in these historic periods.

## 9.2 Water Law in Pre-Soviet Russia

Russian legal scholars considered the water law of the late nineteenth century to be one of the most underdeveloped branches of Russian law. Water law provisions were spread throughout the consolidated legislation. Some were found in civil law, others in municipal, agricultural, forestry, and transportation law. The results were considerable discrepancies and frequent legal appeals. Until 1917, water law presupposed that water was an object of private ownership. At the same time, water law sought to ensure satisfaction of the needs of the population in general. The first prerequisite made water subject to the civil law, and the second a part of public administration. Therefore the goal of water law was to draw a divisive line between privately owned water and water in public use—a conflict that makes up a great deal of water history in Russia.

The question of water ownership and use for transportation was at the core of water law of pre-Soviet Russia. The major focus was on the use of waters as transportation routes, with comparatively less attention to other functions, such as agriculture and irrigation, even though these regulations were crucially important because irrigation was vital for the agricultural sector in southern Russia.

Three types of waters were recognized by Russian water law: (1) open sea; (2) coastal waters; and (3) internal waters, which in turn were subdivided into: (a) water available for public use, (b) water in limited private ownership; and (c) water in complete private ownership. Waters available for public use included navigable and floatable rivers (established by government decision). All Russians had the right of navigation and floating in such rivers. Regulations were obligatory on all individuals floating or navigating the rivers open for public use; other regulations limited the rights of riparian owners to use these rivers.

Waters in limited private ownership included all large and small rivers that were not open for public use, but were suitable for navigation or floating (even if only in spring floods). Riparian owners had no right to prevent other people from using rivers as navigation or floating routes, if navigation or floating were not obstructed by bridges, dams, barrages or other installations in operation. Waters flowing through or located on the territory of several owners were also in limited private ownership. The ownership of the river did not grant the right to own the water as such; the water belonged to all riparian owners, and they all enjoyed equal rights to it. Riparian owners had no right to divert the water if that would deprive others of the river's water. Water created legal relations not only among riparian users, but also among all landowners who needed to withdraw water. Those relationships depended on land ownership; they were determined by agricultural needs and were based on the balance of the interests of private owners and the general public.

At the end of the nineteenth century, some of the *guberniyas* (territorial subdivisions of Russia until 1929) changed the provisions on water use. The original provision was that ownership rights in water (in cases when water goes beyond the borders of one's own lands) are limited by the rights of other water owners using the water for the following purposes: (1) drinking and household use; (2) irrigation; and (3) operating industries. Each landowner was supposed to let the waters pass that were necessary to satisfy those needs. Water practices in towns and villages were established by the decisions of local water use assemblies. Each individual using water from irrigation channels participated in maintaining, repairing, and managing the facilities, either through payments or through voluntary labour. At the same time, peasants of steppe *guberniyas*, where artificial irrigation systems were used extensively, could use water for watering their orchards and gardens on the basis of the law that existed on the abolition of serfdom (19 February 1861), although new irrigation pipes could be installed only with the permission of the landlord (Dingelshtet 1880; Nikolsky 1883).

## 9.3 Water Management During the Soviet Period

It might seem that the collapse of the economic and political systems and the ensuing reforms of the 1990s destroyed the Soviet legacy completely. It may also seem that the new system was put together from scratch and that any vestiges of the Soviet system will disappear after a transition period. The Soviet period, however, played a significant role in moulding the water management bodies of today. The Soviet

water management system in turn inherited some features characteristic of pre-Soviet Russia, although people who came to power in 1917 hated pre-Soviet Russia and did everything possible to destroy the old institutions and to set up everything anew. Neither the revolutionary leaders of 1917, nor the reformers of the early 1990s, managed to break completely from the past. The institutions they inherited did not vanish completely; some were modified and included in the new water management structures of the successor system. Thus, the Soviet institutions are not doomed to extinction and will probably exist for quite a while. Knowing their strengths and weaknesses, as well as their problems, thus remains important. The following sub-sections outline the main characteristics of the Soviet system of water management.

### *9.3.1 Main Characteristics of Soviet Natural Resource Management*

The institutional structure of natural resources management in the USSR was interlinked with its economic and political system as follows: (a) Access to natural resources was strongly limited: most natural resources were the exclusive property of the state; (b) The state held a monopoly over the use of natural resources; access to natural resources (excluding widely spread resources) was denied to actors who were not part of the state apparatus; (c) The regions (*oblasti*) did not have any influence on the management of most important natural resources; their role was insignificant, limited to following commands from the centre; and (d) Natural resource access for state enterprises was free of charge and unlimited in quantity.

This system created rapid and unlimited access to natural resources for the Soviet ministries and their enterprises; transaction costs of access were low. The advantages, however, were combined with a serious shortcoming: The State monopoly did not allow for alternative economic options, resulting in inefficiency for the whole system. State enterprises did not use possibilities they were granted effectively.

### *9.3.2 Property in Water During the Soviet Period*

Water management during the Soviet period was based on the same fundamental principles as the management of most other natural resources. Waters were declared the exclusive property of the state. They were transferred to economic entities only for use. All types of water were included in a single state water fund, including: (1) rivers, lakes, water storage reservoirs, channels, ponds, and surface water reservoirs; (2) groundwater and glaciers; (3) inland seas and other inland waters; and (4) the territorial sea (RSFSR Water Code 1972: art. 4). The ceding of water use rights and all other transactions that violated, directly or indirectly, the right of state property in water were void. Persons found guilty of carrying out such transactions, as well as of unwarranted use of water resources, were subject to criminal or administrative responsibility (RSFSR Water Code 1927: arts. 109, 110).

The state monopoly on water had an important exception: Citizens were allowed to use water resources, with some significant limitations. The USSR thus borrowed some of the practices of pre-Soviet water management, which recognized water to some extent as a public good. The Soviet government declared that making water state property was meant to provide 'truly public control' over the use of water. Declaring water (and all other economic resources) state property was supposed to put into practice the dream about converting all types of ownership into 'the people's property'. This change was accompanied by yet another initiative, according to which water resources could be used free of charge—which corresponded not only to the provisions of Marx's theory, but also to the informal expectations of the general public. When the Soviet water management system, however, faced severe problems (including the scarcity of water resources and frequently occurring droughts), tackling the problems with its ideological tools failed.

### *9.3.3 Water Use During the Soviet Period*

Only state enterprises and organizations, or collective agricultural farms, as well as citizens for their personal use, could use water during the Soviet period. Thus, water represented an important exception to the state monopoly on the use of natural resources in the USSR. Individuals were allowed to use water resources, but not to own them. They were limited to their personal needs, as private entrepreneurial activities in the USSR were strictly forbidden. The following types of water use were distinguished: general water use without any technical appliances and devices; and special water use with the help of such devices. General water use was allowed without any permits, while special water was to be authorized by specific permits (RSFSR Water Code 1972: art.18).

Water use was free-of-charge in the USSR, based on the ideology that value could be created only by human labour. Since no human labour was invested in creating rivers and lakes, there could be no charge for no value was being exploited (RSFSR Water Code 1972: arts. 22, 31). The right to use water could be granted to state organizations and enterprises for permanent or temporary use. Temporary use could be short-term (up to 3 years) or long-term (3–25 years). As periods of water use could be prolonged, temporary use actually represented a form of permanent (and free) use.

### *9.3.4 Competencies of the Centre and the Regions in Water Management*

The central government had the following competencies regarding water (RSFSR Water Code 1972: art. 5): to administer the unified state water fund; to establish the main regulations on water use and the protection of water against pollution and

scarcity; to set up the national norms for water use and water quality, as well as the evaluation methodology; to establish the state water inventory and the water use inventory, water use registers, and the state water cadastre; to approve schemes for complex water use, water protection, and water balances of national importance, planning national water use and water protection activities; to exercise state control over water use and water protection; and to define water bodies, the use of which is regulated by the central authorities.

The Russian Soviet Federative Socialist Republic (RSFSR), one of the union republics of the USSR, had the following competencies (RSFSR Water Code 1972: arts. 6, 14): to administer the unified state water fund on the territory of the republic; to establish the order of water use and water protection against pollution and scarcity, and to plan water use and protection activities; to approve schemes of complex water use, protection, and balances; and to exercise state control over water use and protection.

Disputes between water users belonging to different territories or regions were decided by a committee consisting of equal numbers of representatives of the territories and regions involved. In case the commission failed to settle the dispute, it was to be adjudged according to a process established by the RSFSR Council of Ministers (RSFSR Water Code 1972: art. 86).

Despite these provisions, the legislation contained no clear-cut functional division of competencies between the USSR (the centre) and the union republics or other regional units of government. Instead, the competencies in the sphere of water management intersected. In the Soviet period, this was not a problem and it did not mislead anyone: All actual decisions on major issues were taken not by state authorities, but by the Communist Party of the Soviet Union guided by the principle of strong centralization. Authorities also considered the decisions of national bodies to be more important than decisions taken at lower levels. This centralized management of water use and protection was performed mainly by a special central ministry—the Ministry for Melioration and Water Economy of the USSR and its local branches (RSFSR Water Code 1972: art. 8).

### *9.3.5 Water Protection*

Water could be used for waste discharge only with permission of the regulating authorities (RSFSR Water Code 1972: art. 74). Wastewater discharge was allowed when the pollutant's concentration did not exceed established norms and if wastewaters were treated by the water user. There was, however, a huge gap between the formally declared requirements and the actual state of affairs. Water protection areas and protective sanitary zones were established (RSFSR Water Code 1972: art. 98). Water protection was also included in national economic plans (RSFSR Water Code 1972: art. 93). When granting construction and water use permits, authorities were to comply with the schemes of water use, protection, and balances (RSFSR Water Code: 1972: art. 99). Water balances that assessed the availability and use

of water were drafted for basins, economic regions, union republics, and the USSR in general. General and basin plans defined major activities aimed at satisfying prospective water needs, as well as water protection (RSFSR Water Code 1972: arts. 105–107).

### *9.3.6 The Problem of Drought*

Soviet economic activities involving water started with an ordinance 'On combating drought' (1921). Fighting drought continued to be a major priority into the post-World War II period, when the USSR introduced extensive irrigation. In 1946, with the country suffering a severe drought, the RSFSR Ministry for Agriculture established the Water Economy Agency. The government explained that water resource shortages resulted from uneven distribution of water resources throughout the USSR. The European part of Russia, with about 80% of the population, industry, and agriculture, has only about 8% of the total water resources. Large-scale canal construction was begun to redistribute the available water resources, with canals the size of large rivers.

Water resources grew more and more insufficient for satisfying the needs of the economy. In many regions of the USSR, this problem was seen as caused by wasteful water use, water losses, and pollution of surface waters. Enhancing the efficiency of water use became a priority, resulting in a decree of the RSFSR Council of Ministers 'On increasing state control over the use of groundwater and on activities aimed at groundwater protection' (1959). A number of normative legal acts were adopted in this period; many of them addressed not only the issues of water allocation and water protection, but also the question of rational water use. In 1970, the Supreme Soviet adopted a law on 'The fundamentals of water legislation of the USSR and the union republics' whereby everybody had to use water rationally (through regulating water flow by: constructing water reservoirs; inter-basin redistribution of water resources; and introduction of water saving activities in each basin), conserve water, and promote water quality enhancement. Other laws were also adopted.

By 1985, the USSR Ministry for Melioration and Water Economy included 26 research institutes, 68 design and exploration institutes, and 3,660 construction companies, which used about 90,000 diggers, bulldozers, and scrapers. The Ministry and affiliated institutions employed over 1.7 million people, but the Ministry was dissolved after the harsh reaction of Russians against its plans to change the course of the Siberian rivers. This organization and its activities in the Soviet times had a bad reputation. The democratic movement in Russia was one of the severest critics of those policies, using the Chernobyl catastrophe and the plans to change the course of the Siberian rivers as arguments against the Communist regime. Now we are witnessing a revival of plans for the Siberian rivers, reintroduced by Yuri Luzhkov, the Mayor of Moscow, who formerly was a leader of the democratic movement. The problem of drought became less acute after Russia

integrated into international trade, but it may become more threatening in the context of global warming.

## 9.4 The Post-Soviet Period: The 1995 Water Code

The reforms of the 1990s established a new legal regime for water management in Russia. A new Water Code was adopted in 1995. Its major elements were: State ownership ceased to be the only type of ownership of water resources; the state property in water resources in the Russian Federation does not equal state property under the Soviet regime; in contrast to the Soviet period, water users could be juridical persons as well as governmental organizations, ending the state monopoly over water utilization; the right on access to water resources depended on a licenses; natural persons preserved the right to use water resources and some significant limitations from Soviet times were abolished; and the mechanisms of water allocation were modified considerably, with price becoming a major feature.

Although in the early 1990s Russia underwent radical economic reforms, which should have implied the privatization of natural resources, formal ownership rights to water did not change significantly. Introduction of private property affected only a few waters of secondary importance. The state lost its exclusive ownership right, but kept its dominant position. At the same time, considerable shifts were made in distribution of responsibilities in water management. The federal government transferred some competencies to the regional level because of the transition from unitary to federal structures. Moreover, transformation to the market economy was translated in water management to the introduction of fees for water use. Corporate water users were to pay fees, whereas state and municipal organizations were exempt. Natural persons still enjoyed free access to water resources without paying fees, thus avoiding conflicts between the legal system and informal public practices. The authorities therefore could no longer control the use of waters as strictly as in Soviet times due to the lack of the necessary tools. Numerous water law violations by the general public went unpunished. Often, the authorities just shut their eyes to the violations. Aspects of these reforms and their consequences are summarized in the following subsections.

### *9.4.1 The Degradation of Water Resources*

Surface waters are the source of drinking water supply in Russian cities. Drinking water degrades for two reasons. The first is pollution from, inter alia, the residential sector which dumps wastewaters into water reservoirs annually. The second is the high consumption of fresh water per unit of gross domestic product. Daily losses of water in residence water line networks alone amount to millions of cubic meters.

Measures to restore waters in Russia lag behind their degradation. As a result, the water deficit is increasing while water quality continues to deteriorate.

### 9.4.2 Water Property Rights Reform

The Water Code of 1995 reformulated water law. Water resources became subject to property rights. Water use was governed by civil and sanitary legislation. Isolated waters were included in real estate. State property in waters was established in the Russian Federation as in the former USSR, but with significant differences. State property in waters was no longer exclusive. The law recognized municipal and private property in waters. Individuals and legal entities could own isolated waters, i.e., small and non-flowing artificial waters, not connected with other surface waters. Waters that were state property could not be transferred to municipalities, individuals, or other legal entities. Waters could not simultaneously be the property of several owners. The reform of property in waters led to payment becoming a principle of water use and protection.

State property in waters in Russia remained the main form of property. Still, a great number of waters had no owners or their owners were not determined, and some waters were not formally registered as anyone's property. The water economy includes waters *per se* and installations in these water bodies. There are 30,000 barrages in Russia, less than 1% now in federal ownership. Some of these barrages are 300 years old. Most large barrages and reservoirs have owners, but smaller barrages installed in rural areas do not belong to anybody after the collective farming system collapsed. Some 5,000–10,000 are 'no man's barrages'. The Ministry of Natural Resources addressed this by transferring their ownership to the regions. It could not transfer them to private property, which was forbidden by law (Khamitov Interview 2005). A former Minister of Natural Resources of Russia commented upon this situation that there is nothing to divide here 'except responsibility and headache'. This does not mean that nobody was using those waters. But who was responsible for those waters, for their maintenance, repair work, and protection? To a great extent, the Soviet system fell because state property, which included almost all-national wealth, actually belonged to no one. Nobody felt responsible for it and almost everybody plundered it. Water and facilities without an owner was a serious problem.

### 9.4.3 Rights of Water Use

The new legislation expanded the range of water uses. The State monopoly was eliminated and the new legislation introduced rules constraining water use. Waters that remained state property were granted to individuals or legal entities for long- and short-term use, including rights of limited use (water servitude).

Individual water users had the right to use waters freely for their own needs and for entrepreneurial activity after obtaining a license. Legal entities were entitled to use waters only after obtaining a license. State and municipal waters were waters of common use. Waters that were the property of individuals or legal entities could be used for common use only if this limitation was registered and reimbursement was paid to the owner. Strands along the banks of waters of common use were subject to common use. The right to water use could be transferred from one person to another only on the basis of a management license. Forced termination of rights to use waters was possible if the water were not used, if waters were not used in accordance with their stated purpose, or if it were necessary to use the waters for state or municipal needs. Finally, rights of short- and long-term use of waters were established for periods of up to 3 years and 3–25 years, respectively.

### *9.4.4 Users Without Licenses*

There were about 54,000 water users in Russia in 1998. Only 37,000 water users possessed permits for the use of waters. Thus, one third of water users accessed waters without a legally registered right. The situation for groundwater was especially grave: 12,300 licenses for the use of groundwater were issued, yet some 75% of groundwater users were operating without licenses (Khamitov Interview 2005). Water users evaded the licensing requirement as a premeditated strategy. This implies that many waters have no owners who are legally responsible for their condition and many water users without licenses were accessing waters.

### *9.4.5 Payments for Water Use*

The reforms of the 1990s made payment for water use the paramount principle of water management (Water Code 1995: art. 121). Payments were due for: (1) water withdrawal; (2) hydropower generation; (3) timber-rafting; (4) mineral extraction; (5) communications; and (6) the discharge of wastewaters. Payments for water withdrawal were not imposed for: (1) fish breeding; (2) navigation; and (3) irrigation. Only industrial enterprises, however, were to pay for water withdrawal. Minimum and maximum payments rates were established within economic regions. Untimely or incomplete payment for the use of waters became a serious problem. Numerous forms of evasion were devised. The federal obligation to pay for water use was not introduced by the regions in due time. More than half of Russia's regions did not forward the federal portion of the payments to the federal budget. Twenty-two regions transferred less than 10%, another seven regions less than 5%, and one region less than 1%. Four regions made no payments to the federal budget for the use of waters at all. Evasion of payments was actively practiced by enterprises as well.

### *9.4.6 Balances and Limits in the New System*

Quantitative instruments (water balances) should have ensured the distribution of water between water users in the Soviet period. Water balances survived in the Russian Federation, but they were applied in a radically modified manner. Water balances within the new system represent calculations whereby water needs are compared with water resources available within a river basin. Thus, water balances in the Russian Federation were instruments for the calculation of some parameters. Limits—the maximum allowable volumes of water resources withdrawal or the discharge of wastewaters of the required quality—were established on the basis of the water balances and information provided by applicants concerning their needs. The limits were fixed in the license. Water use limits couldn't be revised, but for enterprises they were not a rigidly fixed amount. The limits combined quantitative regulation with a flexible price. When the rate at which water was withdrawn and wastewaters were discharged exceeded established limits, the rates of payment for the payer were raised—at least in theory.

### *9.4.7 Drinking Water Supply*

Federal programmes prioritized ensuring drinking water supply of appropriate quality and sufficient quantity. Implementation included: (1) the saving of drinking water; (2) improvement of drinking water quality; (3) the use of groundwater in the regions where surface waters were heavily polluted; (4) reconstruction of water supply systems in rural settlements; and (5) a regime of protected zones that were sources of drinking water supply. A special focus on the wider use of groundwater was encouraged. Construction and reconstruction of urban centralized systems of water supply should have increased the share of groundwater and should have reduced water consumption by 20–25%.

## 9.5 The Post-Soviet Period: The Water Code of 2006

A new Water Code was adopted by the Federal Assembly in 2006 and entered into effect in 2007 (Water Code 2006), replacing the Water Code of 1995. The Code of 2006 took a lot from the Code of 1995. Implementation of the new Code will be far from easy. The new water regulations not only aggravate the previous problems, but they also bring new ones. The power elite developed its own informal practices, which significantly hampered the implementation of regulatory norms while the elite gain strength to determine policy according to their interests. Therefore, the conflict between formal norms and informal practices may become more evident in the future. The Code stresses two significant points: the possibility of private ownership of waters; and the possibility of regulating water relations through civil law.

The major innovation of the new water Code is the redistribution of ownership of waters between the federation and the regions, which strengthened the position of the federal authorities significantly. Consequently, there is a revival of centralized water management in Russia, although under a different name. The following subsections examine these changes in more detail.

### *9.5.1 Ownership of Waters*

Like the Code of 1995, the Water Code of 2006 addresses the private ownership of waters. As before, private ownership applies only to a limited number of waters of secondary importance—ponds or watered borrow pits that are treated as part of the lands in which they are located. Rivers, lakes, reservoirs, swamps, glaciers, canals, territorial waters, and groundwater, fall under federal or regional, but not municipal, ownership (Water Code 2006: art. 8). The Water Code of 2006 stipulates that natural persons have free access to water resources. State-owned (owned by federal or regional authorities) and municipal-owned water bodies are declared 'accessible to public' (Water Code 2006: art. 6).

### *9.5.2 Agreements Instead of Licenses*

Agreements with large water users—legal entities—grant them the right to use state-owned and municipal-owned waters for the following purposes: (1) water withdrawal; (2) use of riparian areas; (3) electricity production; (4) provision of state security and defence; (5) wastewater discharge; (6) quays and ship repair facilities; (7) hydro-technical installations, irrigation systems, pipelines, submarine lines; and (8) minerals prospecting and mining and other purposes (Water Code 2006: art. 11). These grants require special agreements. The agreement is to stipulate: (1) the purposes and terms of water use; (2) the duration (not to exceed 20 years); (3) the amount and timing of payments for using the waters; (4) terms for cessation of the use; and (5) the responsibilities of the parties (Water Code 2006: arts. 13, 16). Such agreements replace the licenses that previously confirmed the right to water uses. Licenses had been subject to unilateral cancellation by the issuing authority. Water agreements can be terminated only according to civil law procedures (Water Code 2006: art. 17), generally requiring a court decision.

### *9.5.3 Water Use Fees*

Water use fees are determined on the basis of the following principles (Water code 2006: arts. 18, 20): (1) encouraging rational use and protection of waters; (2) differentiating

fees by water basin; (3) regularity of payments; (4) a fine, five times the water use fee, for withdrawing water in excess of the quantities fixed in the agreement; and (5) a delay penalty for untimely payment for water use. Rather than a tax, it is an agreement-based payment. In the future, more money is expected to be collected from water use fees by increasing the agreement payments and by expanding the group of payers. Until 2007, navigation companies and agricultural companies did not pay for water use, and pollution fines were not applied to housing and utilities sector. Even now, fees for these companies are a much lower than for industrial water users.

### *9.5.4 Federal Competencies in Water Management*

The Water Code of 2006 develops the competencies of the federal government and governmental bodies in detail, thereby determining the functioning of water management as a whole. These competencies are merely listed in the Code, without specific descriptions. The list of federal competencies in water management is extensive (Water Code 2006: art. 24): (1) owning, using, and managing federally owned waters; (2) drafting, approving, implementing, and amending schemes for the comprehensive use and protection of waters, including criteria for identifying waters that need federal control and supervision as well as regional control and supervision; (3) exercising control and supervision over waters, including monitoring; (4) establishing procedures for granting permission or concluding agreements for using water; (5) creating and operating basin councils; (6) deciding on hydrographic and hydro-economic zoning; (7) establishing fees for using federally owned waters and procedures for collecting such fees; (8) enforcing state control and supervision of the use and protection of waters, including establishing the maximum allowable impact on waters and water quality indicators; (9) redistributing surface waters and recharging groundwater, including defining rules for using and maintaining reservoirs; (10) reserving drinking water sources; (11) regulating activities affecting federally owned waters occurring on the territory of two or more federal regions; (12) defining the methodology for calculating damages to waters; (13) identifying persons responsible for federal control and supervision; and (14) other powers stipulated in the Code.

### *9.5.5 Informal Power Structures*

In Russia, as in other societies, not only economy, but the society in general and the state live by unwritten laws, often leaving a huge gap between legislation and economic and social reality (Yavlinsky 2003: 30, 77, 79). ‘Informal relations’ may be defined as roles and norms of behaviour that are not established by legislation and that differ from it—unspoken, tacit rules of conduct that existed in the pre-Soviet,

Soviet, and post-Soviet periods. In the Soviet period, these relations determined the exchange of services between managers of different levels and spheres (the so-called administrative market). Norms of official law can only be applied to the extent that they do not contradict the unofficial rules of conduct.

Grigori Yavlinsky describes 'unreasonable expectations' that often accompany privatization, concluding that in Russia 'privatization … did not change anything—you can choose any formal legal status, but the real motivation and essence of economic agent's behaviour are determined not by the status, but by the nature of this agent and the real context in which he finds himself.… [L]iberalization of market economic activity was substituted by liberalization of privatized monopolies. Private property without competition is more harmful from the economic and political point of view, than state property' (Yavlinsky 2003: 19, 21). The symbiosis of three elements—informal relations, privatization and liberalization—opened the way for oligopolistic structures. In the reforms of the 1990s, 'market relations were not developed anew,' but 'were included into the already existing system of informal relations in the sphere of resource management and ownership … [A]ll subsequent attempts to create real institutions often proved to be useless—the new institutions voluntarily entered the established system of illegitimate relations, thus turning into a feeder for civil servants or into a useless decorative element' (Yavlinsky 2003: 22). Conflicts between parties are settled on the basis of belonging to certain interest groups. The power to solve the conflict in favour of one of the parties may be exercised, if the decisive actors, irrespective of their official status, have real power (Yavlinsky 2003: 22). '[T]he formal title of an owner … does not mean anything' without the actual control over the resources, 'which, by the way, can be established without procuring ownership of the assets … [I]n such circumstances, the … private property right cannot be unconditional' (Yavlinsky 2003: 30–31).

An analysis of the situation in water management in 2005–2006 shows that despite numerous laws, codes and ordinances, the legal norms remained vague, with legal loopholes and non-execution of the laws (Khamitov Interview 2006). The federal water agency received the Water Code of 2006 more favourably. Yet the new Water Code is no less vague than the previous one, and that was noticed by the Russian media. Some 70 State Duma (legislative) deputies sent a letter to the President of the Russian Federation in 2006 insisting on 'significant revision' of the new Water Code. The federal water agency is more concerned with further centralization of water resource management, rather than clarification of private or other rights.

Water management authorities at the federal and regional level have fought for many years over the collection of water use fees. In 2004, federal entities reported collecting nine billion roubles from water use fees. Only 20% of this amount was reinvested in the water economy. In 2006, a federal water tax was levied, producing 13 billion roubles, all of which were spent on the water economy. Federal entities, however, give a different opinion about the situation. They claim that federal authorities use water use fees as a primary financial tool, that they do not take into account regional interests in funding specific water-related projects, and that they use the collected money on purposes very distant from water economy.

Adoption of the Water Code of 2006 strengthened the position of the federal authorities, as all significant waters were transferred from ‘state property’ (which could be used by the federation or the regions, and which required a lot of effort and further negotiations to define their respective authority) to federal property. Federal authorities now have the right to establish their own control over this precious natural resource. Non-transparent water legislation plays into the hands of the federal bureaucracy. Their headaches are caused by the so-called ‘no man’s waters’. A solution seems to exist: The transfer of some responsibilities from federal level to the regions, including protection of waters, pollution prevention, the concluding of agreements with water users, flood mitigation, and disaster relief. The implementation of these competencies (and responsibilities) is very expensive. It would only be interesting to know how these extended responsibilities of regional authorities will be funded.

## 9.6 Conclusion

The new water legislation was developed and came into effect more than 10 years ago. Major problems emerged in implementation. Institutional structures changed dynamically over time. This chapter compares contemporary water management institutions and their historical predecessors (Soviet and pre-Soviet). These comparisons allow the drawing of the certain conclusions.

When analyzing Russian water legislation, it becomes clear that water management plays by the same rules (formal and informal) as the political and economic system generally. The formation of Russian water management structures was an integral element of the broader process of revolutionary transformation, and was a derivative result of the more comprehensive changes. The problems in Russian water management cannot be addressed merely within their own framework, and the ensuing problems cannot be solved simply through changes and corrections of water management alone given the serious deformation of economic and administrative structures in Russia. Today, some argue that Russia’s economic problems (including water management) result from the transfer of Western management practices. This theory does not give an adequate explanation of the problems. The models borrowed from the West were implanted into the informal structures inherited from the Soviet period; in the symbiosis of Western practices and informal relations, the latter dominated. Organizational structures and stereotypes stemming from Soviet times hampered further development and implementation of efficient management models.

In Russia, conflict between informal practices (local traditions and customs) and formal regulations (the legal regime) is one of the main characteristics of the present water management system. This conflict makes the institutional management structure unstable and contradictory, often turning formal water law regulations into decorative elements. Although the governing authorities have tried to fight the destructive influence of the informal practices on the formal law structure,

that proved difficult. Recently they have chosen to avoid a head-on collision. Informal practices developed over years, and the reasons for their development are found in the past, sometimes deep in the past. These patterns change very slowly, and in many cases they cannot keep up with external changes. It would be unrealistic to expect to overcome them easily.

Informal practice patterns are not universal for all groups of Russian society. The general public believes access to water (and other natural resources) should be open and free of charge. Russian peasants never recognized land ownership by the Russian nobility, believing the land belonged to the God. This gave rise to a heated and long-running conflict, shattering society and leading to the downfall of the Russian state in 1917. Water resources, however, did not cause such dramatic conflict as the land problem because even in the pre-Soviet period the authorities maintained that water resources had a status close to a public good and limited private ownership rights to water resources. This approach was justified by the role of water as a transportation route—all the more significant because of the poor state of Russian roads and the government's ambition to develop trade. At the same time, according to water law, the general public had free access to water resources. In the pre-Soviet times, water resources were not yet becoming scarce (unlike land). Water shortages were only from time to time and primarily in the steppe regions of Russia. The irrigation culture was not yet developed in Russia, except in the Crimea and in Transcaucasia. For the larger part of Russia, water was quite abundant, and people faced a contrary problem—the excess of water and the consequent need for drainage. Water was not yet considered an economic resource, and private ownership of access to water was useless. The potential conflict between the common belief that water belonged to God and the formal law did not arise and water disputes did not become as acute and as destructive as the conflict over land.

In the Soviet Union, water resources were declared the exclusive property of the state. Water resources, just like all other resources, became a subject of state monopoly that was maintained and protected by power. That monopoly contained a very significant exception: The general public had the right to use water for personal and household purposes, which in turn were subject to a significant limitation, namely that people had no right to use water for industrial or commercial purposes, as private entrepreneurship was strictly forbidden in the USSR. Another significant phenomenon is that, in line with Marx's theory, all natural resources (including waters) could be used free of charge, as human labour was not invested into the production of these resources. Soviet enterprises took advantage of this provision, and savagely wasted water resources, creating drinking water shortages throughout the country. Reverberations of the Soviet past can still be traced in the Water Code of 1995 that declared some of water users exempt from water use fees.

It may seem strange that open access to water resources and free-of-charge use of water continue to exist in the Russian Federation, even after the liberal post-Soviet reforms, and that they are proclaimed by the Water Code of 2006. But times change, and water is becoming scarcer as demand increases and environmental imperatives influence use. Conflicts between informal practices and the formal norms exist, and authorities have to consider these conflicts in their legislative

and executive practices. Conflicts inherited from the past are now aggravated by new ones, triggered by the new structure of Russian society and new managerial arrangements. The essence of the water management dilemma in Russia is that the demand for conserving water resources becomes more urgent and clashes with the lack of adequate tools to combat the plundering of water resources. The administrative levers of Soviet times are no longer applicable in the new political context, while the new (market) water policy tools are blocked by informal practices widely spread among the general public and the power elite.

If we look at three main periods in the development of the Russian state—pre-Soviet, Soviet, and post-Soviet—we can see that all three are characterized by strong dominance of the state as the main agent of water management. As old political and economic structures were replaced by new ones, the dominance of the state always held true. Not only the genetic basis of that dominance, but also its congenital problems, were passed on to descendants. These problems are deemed unsolvable by many politicians and decision-makers, just like chronic incurable diseases. Such attitudes stymie reform efforts. As Viktor Chernomirdin, a Russian prime minister in the 1990s, said, 'We intended for the best, but the result has been as usual'. It is a bitter evaluation of wasted time and effort, an expression of hopeless fatalism and belief in the powerful heritage of the past determining the fate of the people and the country. Perhaps a long-term analysis of these problems offers a new perspective that suggests an innovative approach to solving these problems.

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