Chapter 10
France's Water Policy: The Interest and Limits of River Contracts

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10.1 River Contracts and Water Management in France

France tested so-called clean river operations in the early 1970s to more effectively combat industrial, agricultural, and domestic pollution. The goal was to restore surface water quality, mainly by constructing wastewater treatment stations and sewerage networks. In the 1980s, France introduced the river contract, adding flood control and public awareness to pollution control. The decentralization and Europeanization of water policies have encouraged the development of river contracts, but their development is no guarantee of their effectiveness from an environmental standpoint. The state's objective is to respond to European Union (EU) water obligations.

A river contract is an agreement between the state and volunteering local authorities.[1] It includes 5- to 7-year study and works programs, and can be renewed. Through these programs, towns, industrial companies, and farmers can pool their resources and set common objectives at the watershed scale (river, lake).

[1] The decentralization law (1982) created the principle by which local authorities were independent in terms of managing their territory. Local authorities in France are administrative structures, distinct from the state administration, that take care of the interest of residents living in a given territory. The following three levels of government are considered to be local authorities: communes (similar to cities, also referred to in this book as municipalities), départements (departments), and régions (regions). The commune is the lowest administrative division. It is headed by a mayor elected for a 6-year term. The région is the largest local administrative division.

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The results, however, have fallen short of the state's initial objectives because river contracts have focused too much on curative actions, and not on preventive ones.

The state manages rivers, canals, and lakes used by commercial and pleasure boats, but such public water bodies, including the River Seine in Paris or the Rhône in Lyon, represent only a small part of the French river system. Only 20,000 km of waterways are publicly owned, compared with more than 200,000 km that are privately owned. Private water bodies—rivers and lakes that are not navigable—are managed by the landowners who live beside them.

Landowners are obliged to manage rivers flowing through their property and manage their hydraulic structures, such as floodways, dams, and weirs. The aim is to remove obstacles to water flow to prevent flooding. However, riverside landowners—farmers and owners of secondary homes—are less and less inclined to carry out this work, forcing the state to find ways of involving them more effectively.

The other important player in riverside water management is the municipality, which is the lowest administrative division of France. Since 1885, municipalities have been responsible for the organization of drinking water supply and sewerage services. In addition, municipalities often have been obliged to work together in the framework of local authorities to carry out maintenance that should have been done by riverside landowners, in particular in the countryside, where fewer farmers operate than in the past.[2] Aware of the difficulties encountered by municipalities and confronted with increasingly serious pollution problems, the government passed the first Water Act in 1964. The goal was to optimize water management to preserve the quality of water resources and reduce conflicts between upstream and downstream users.

10.2 Advances and Limitations of the 1964 Water Act

The 1964 Water Act created six water authorities: Seine-Normandy, Loire-Brittany, Adour-Garonne, Rhine-Meuse, Rhône-Mediterranean-Corsica, and Artois-Picardy.[3] These water authorities[4] are responsible for charging fees related to the water

[2] According to the French Ministry of Agriculture, the total number of farms was 1.6 million in 1970 and fewer than 600,000 in 2003. The average surface area of the farms is now 70 ha (700,000 m^2) (Source: http://agriculture.gouv.fr/evolution-des-exploitationsconsulted on June 29, 2011).

[3] The area covered by each one of the six authorities does not correspond exactly to watersheds. For example, the Loire-Brittany authority takes care of the Loire watershed as well as coastal rivers in Brittany. See Chap. 2.

[4] Water authorities are state public administrative bodies under the French Ministry of Ecology and Ministry of Finance. They are managed by a board of directors that includes representatives from local authorities, various types of users, the state, and the water authority. The president of the board of directors and the manager of the authority are appointed by the government. *Cf.* Law no. 64-1245 of December 16, 1964, concerning the status and distribution of water and pollution control measures.

consumption and pollution by towns, farmers, and industrial players based on the polluter-consumer-pays principle. Three-quarters of the money obtained from these fees is redistributed in the form of investment, subsidies, or loans in the context of multiannual programs, in which each authority's priorities are defined. The actions of the water authorities represent a major financial lever today,[5] but their environmental impact remains limited (Cour des Comptes 2010).

When the act passed, experts hailed it as a major legislative breakthrough in Europe. The lawmakers emphasized "natural territories" (i.e., basins of the major French rivers) at the expense of the many small administrative areas such as the municipalities (Brun and Lasserre 2006; Ghiotti 2007).

Yet the emergence of river basins as "new territories" in water management did not prompt the state to relieve the municipalities of any of the obligations they had borne since the nineteenth century, including sewerage and drinking water supply. On the other hand, the municipalities were obliged to coordinate their respective local water policies and comply with state regulations in order to benefit from public aid for constructing or modernizing sewage treatment plants and building drinking water treatment plants, distribution networks, and other projects.

French legislation concerning the protection of the environment expanded considerably following the creation of the Ministry of the Environment in 1971. The emergence of the environment on the public scene and the environmental disasters widely publicized by the media explain why the French parliament passed several major pieces of environmental legislation. Some of them concern water and more generally "aquatic environments," (i.e., water as a resource for users but also as a "biological reserve" or "landscape"), according to the Water Framework Directive, or WFD.[6]

The EU also adopted a series of directives and regulations concerning the water sector beginning in the mid-1970s. EU member states had to transpose these into their national laws (quality of bathing water, quality of drinking water, etc.). Unfortunately, the diversification and stiffening of laws and regulations concerning water did not help modify bad practice on the part of users or intensify the involvement of landowners.

To supplement the legislative and regulatory aspects of water policy, the government created a contractual instrument referred to as "clean river operations" during the 1970s. These operations were supposed to be sufficient to meet the water quality targets set by the 1964 act. Dozens of local authorities seized the opportunity these operations presented to implement works that were, at the time, considered as priorities, in particular the fight against urban and industrial pollution.

[5] More than 10 billion euros between 2007 and 2012.

[6] The Water Framework Directive (2000/60) was designed to improve regulation and management of Europe's water resources. See Chap. 3.

10.3 The Origin of River Contracts

Clean river operations were designed to restore neglected rivers and encourage riverside landowners, users, and local authorities to begin managing them again by involving them in a common project. These operations were managed by the different ministries concerned with helping local initiatives. Certain operations sparked the interest of local players when they were launched, but outputs were difficult to quantify (Brun 2010).

In 1981, the government presented the river contracts as the logical follow-on to the clean river operations.[7] Five factors explain why river contracts were introduced:

1. In partnership with the water authorities for which it was responsible, the Ministry of the Environment implemented river contracts to part with public policies that did not sufficiently take into account the specific geographical characteristics of local territories and the economic difficulties facing users. The ministry therefore adopted a more local-based, more participatory, and less restrictive approach than laws and regulations imposed on territories and local stakeholders.
2. It was a way of getting local agencies of the Ministry of Agriculture and the Ministry of Public Works to carry out development programs that would cause less damage to aquatic ecosystems than they had in the past.
3. The state held that these contracts could help compensate for insufficient resources devoted to controlling water users and monitoring aquatic ecosystems.
4. The government wished to encourage mayors in rural areas to ensure farming practices would have less of a negative impact on aquatic environments.
5. The state brought together issues that the lawmakers had separated. Thus, in the framework of a river contract, the issues of water quality and flood risks were combined in an overall approach, while water legislation was still divided into two distinct areas: the restoration of water quality and laws concerning flood risks.

10.4 Objectives and Principles of River Contracts in 1981

At the outset, river contracts had two goals. The first was to rehabilitate the principle of regular watercourse maintenance to make up for the lack of involvement of riverside landowners. The second was to achieve the quality targets fixed by the regulations for certain rivers at the end of the 1960s. The river contract was based on four broad principles: voluntary participation, implementation at the scale of small river basins, solidarity among stakeholders, and simplicity.

The first principle held that a river contract was not obligatory and therefore differed in its very essence from laws and regulations. It was an approach based on the voluntary involvement of local players (Billet 2008). The second principle involved originally devising river contracts at the scale of small river basins.

[7] Circulars of February 5, 1981, and November 12, 1985, relating to the creation of river contracts.

The decision to exclude major river basins, such as the Loire, stemmed from the fact that the state wished to concentrate its resources on territories deemed a priority by the public authorities, where it would be easier to measure environmental improvements on completion of the river contracts.[8] The third principle involved a river basin approach, which would compel local players to renew water governance methods. Local players therefore had to deal with a territory, that of the river basin, that was unfamiliar to them. In preparing action programs at this scale, the municipalities and users realized they were interdependent from one another in terms of water. Solidarity between stakeholders was the condition imposed by the state before it would agree to a project for a river contract.

The fourth principle pertained to mayors and water users, who needed to be able to understand why and how they could become involved in a river contract. For this reason the procedure is a simple one: local stakeholders have to prepare a draft of the contract and submit it to the National Approval Committee (CNA),[9] which is made up of experts based in Paris. The draft contains a brief assessment of the river basin and is followed by proposed measures for each of the issues identified in the assessment, together with a governance method. The river contract is then described in detail—specifying the budget, stakeholders, employer (municipality or group of municipalities that will hire the technical and administrative staff), and river committee—before the CNA finally accepts it. The river committee consists of institutions, associations, mayors, and other local stakeholders and oversees the implementation of the contract through to completion.[10] River contracts got off to a rocky start, as only a few were signed between 1981 and 1985, but they experienced considerable success among local players, particularly mayors, in the 1990s and early 2000s.

10.5 The Political Success of River Contracts in the 1990s and 2000s

The political success of river contracts in the 1990s and 2000s can be explained by the opportunism of local elected representatives. Mayors realized that river contracts had a twofold advantage. First, they were a way of getting the state to

[8] The changes made to river contracts by the Ministry of the Environment in the early 1990s and then in 2004 had several consequences. In particular, relatively large river basins were given approval by the National Approval Committee and the procedure was extended to include bays, estuaries, and lakes. They were henceforth referred to as "environmental contracts" (Cf. Ministerial circular of October 24, 1994, relating to the 10-year plan to restore and maintain rivers and defining the purpose, content, and procedure for drawing up river contracts.

[9] Comité National d'Agrément.

[10] The ministerial circular of January 30, 2004, which transferred the approval procedure to basin committees, removed the solemn and exceptional character of the first river contracts; only a few of them were adopted and the minister of the environment sometimes came to sign the documents in person.

finance part of the studies and works, which they would otherwise have to pay for themselves. Second, they offered a way of managing water more appropriately than in the past, in particular between municipalities situated upstream and downstream in a given river basin.[11]

In spite of their differences, municipalities were among the local players with the most to gain from working together at the scale of a small river basin to present a credible project to the state authorities. They realized that they were required to carry out increasingly costly work to bring their sewage treatment and drinking water production plants up to standard to comply with EU public health regulations. Mayors, who were often in conflict with one another over the issue of water management, seized the opportunity offered by river contracts to have some of the necessary works financed by the state or intermediate administrative bodies, such as those at the regional level.

The principle of water management based on river basins also gradually won over municipalities that had been opposed to any reform of local water management. If a municipality upstream did not effectively control pollution, the financial efforts made by all the other municipalities further downstream to eliminate pollution would be to no avail. The same thing goes for the quantitative management of water: if municipalities upstream help themselves to too much water, those further downstream may experience periodic shortages. Consequently, many municipalities adopted the principle of basin-wide management to more efficiently manage water.

From the middle of the 1970s to the middle of the 2000s, the reform of public administration in France and the increasing Europeanization of public policies encouraged the development of river contracts. In 1982, decentralization—the transfer of some of the state's duties and prerogatives to local authorities—gave mayors greater responsibility in the area of regional development and the environment. In the area of water, river contracts were at the time the only instrument that enabled local players—and in particular municipalities—to pool their financial resources.[12] River contracts were also one of the ways of planning and coordinating action at the scale of small river basins.

In addition, Europe has produced more stringent and wide-ranging directives concerning water over the past 30 years. The Water Framework Directive, which was adopted in 2000 as a result of this process, requires EU member states to bring

[11] Latour and Le Bourhis showed the extent to which the implementation of a local water policy depends on the determination of local elected representatives (1995).

[12] Municipalities work together at two levels in the context of a river contract. First, they become jointly liable financially, insofar as each contributes to a structure in which they are grouped. The contributions from the municipalities vary according to tax revenue, number of inhabitants, length of river concerned, etc. These contributions are used to pay staff (engineers and technicians) responsible for designing, monitoring, and evaluating the river contract. Second, they are technical partners in the sense that they draw up a program that does not penalize any of them.

together managers and users in the context of local governance. In this way, mayors have become the artisans of local water policies. Municipalities now act together in commissioning studies of hydraulic, landscape, and fish-related issues prior to implementing development works. Mayors chair river committees, the bodies responsible for making decisions connected with river contracts (definition of actions, voting of annual budgets, etc.).

Conversely, the state's role has decreased considerably over the same period. To simplify, the government now draws up laws and regulations[13] and monitors their implementation at the local level via the French National Agency for Water and Aquatic Environments (ONEMA).[14] Local civil servants (engineers and technicians) no longer take charge of project management (Ghiotti 2007). Expertise from the public sector has become minimal in comparison with that of private firms. The six water authorities nevertheless remain under state supervision. They have become the municipalities' main and almost only financial partners.

10.6 A Highly Disputed Environmental Track Record

About 200 river contracts at various stages of completion have been identified in France. Most of them were launched between 1990 and 2000. As far as the Ministry of the Environment is concerned, this is a very satisfactory record. Certain authors consider the river contract to be an instrument that serves to implement the objectives of the EU imposed by the 2000 WFD (Drobenko 2004). Indeed, several European countries have experimented with river contracts, if only in the context of cross-border contracts (France-Belgium, France-Spain, etc.). In North America, Québec drew inspiration from them in finalizing its National Water Policy in 2000 (Choquette 2008). But the success of river contracts among mayors in France and their sheer number conceals certain strategic mistakes.

First, the decision to encourage investment in urban and industrial sewerage is contested by independent experts (Cour des Comptes 2002, 2010). In other words, river contracts addressed the problem of water pollution in a curative rather than preventive manner. As a consequence, nearly 2 billion euros have been spent in the context of river contracts.[15] But this expenditure has served mainly to provide

[13] Laws on the environment voted by the French parliament often correspond to European directives transposed into French law.

[14] The ONEMA (l'Office National de l'Eau et des Milieux Aquatiques) is the national public establishment created by the Water Act of 2006. The ONEMA is charged with "conducting and supporting at national level actions aimed at encouraging comprehensive, sustainable and balanced management of water resources, aquatic ecosystems, fisheries and fish stocks."

[15] The financial contribution of private-sector players (leisure sector, hydroelectric producers, and farming) is very limited. In fact, they help finance water policy via "pollution" and "consumption" charges and through the local and national taxes they are required to pay (which contribute respectively to the budgets of local authorities—including municipalities—and the state).

municipalities with sewage treatment plants. River contracts in which public aid was dependent upon introducing less polluting practices or saving water were rare (Brun 2010).

The situation is exactly the same for flood control. Municipalities have preferred to build and maintain dykes and dams to prevent flooding rather than buy farmland able to act as a natural reservoir in the event of a flood. Investment in sewerage and flood prevention has consumed 70–80 % of the funds allocated to river contracts. Certain goals related to the environment, the landscape, and the encouragement of users to adopt more environment-friendly practices have been considered of secondary importance by local players (Brun and Marette 2003; Allain 2004).

The overall result from the environmental point of view is disappointing. The physicochemical and bacteriological quality of surface water has indeed improved considerably. However, certain types of pollution have not been eliminated either because they require long-term treatment that is incompatible with the lifetime of a river contract or because no particular action was taken in this respect in the first river contracts (e.g., pollution by nitrates used in farming). An analysis of water data for 1990–2010 shows the environmental gains in river basins where river contracts were implemented were not significantly higher than those in basins where they were not.

Of course, river contracts have helped reduce conflicts over water use between different users thanks to local governance at the river basin scale. But the competition waged between municipalities to attract jobs and industry to their area is still strong. Mayors also refuse to modify their development strategies, even when the result is more housing construction around drinking water wellfields or property exposed to a greater risk of flooding. In this respect, river contracts are a failure. Urban planning and water management are still dissociated. Furthermore, riverside landowners have not come on board, apart from those who have been able to benefit from public aid to carry out work. In addition, a certain number of local stakeholders themselves and official commissions like the National Approval Committee are not convinced this new local water governance is the answer to improved water management.[16]

Finally, the multiplication of river contracts has led to the hiring of staff to prepare, monitor, and evaluate the resultant action programs.[17] But these contracts are only designed for the short term—10 years at most—so these engineers and technicians are not guaranteed any employment in the future. Should these jobs be made permanent? If so, who is to pay, the state or the municipalities?

River contracts do not replace laws and regulations; rather, they complement them. These contracts are referred to as “gentlemen’s agreements” because they

[16] In this instance, the river committee.

[17] One of the weaknesses of river contracts concerns evaluation at the half-way stage and end of the program. Those responsible for the contract are also in charge of evaluating it. The effect of this is to gloss over the problems that they, in particular those in political positions, have faced.

have no consequences from a statutory point of view, and therefore do not entail any risk of legal proceedings for stakeholders.

The quality of water and aquatic environments in France and in the majority of European states remains mediocre. The lack of involvement of landowners hampers local water management based on river basins, and mayors have other political priorities than providing a preventive, collective, and long-term response to water issues. Contractual instruments and local water participation are still a long way off.

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References

Allain S (2004) Contrats de rivière et agriculture: quel pouvoir incitatif et quelle efficacité environnementale. Revue européenne de droit de l'environnement 4:401–413, Limoges

Billet P (2008) Les approches volontaires et les principes du droit de l'environnement. In: Hervé-Fournereau H (ed) Les approches volontaires et le droit de l'environnement. PUR, Rennes, pp 97–109

Brun A (2010) Les contrats de rivière en France: enjeux, acteurs et territoires. Les Cahiers de Droit 51(3/4):679–704

Brun A, Lasserre F (2006) Politiques de l'eau: grands principes et réalités locales. PUQ, Quebec

Brun A, Marette S (2003) Le bilan d'un contrat de rivière: le cas de la Reyssouze. Économie Rurale 275:30–50

Choquette C (2008) Le contrat de bassin: un outil de gestion à géometrie variable. In: Choquette C, Letourneau A (eds) Vers une gouvernance de l'eau au Québec. MultiMondes, Québec, pp 281–298

Cour des Comptes (2010) Synthèse du Rapport public annuel de la Cour des comptes, Paris, p 48

Cour des Comptes (2002) Rapport public particulier sur la préservation de la ressource en eau face aux pollutions d'origine agricole: le cas de la Bretagne

Drobenko B (2004) Les contrats de rivière et le droit communautaire de l'eau. Revue européenne de droit de l'environnement 4:383–400, Limoges

Ghiotti S (2007) Les territoires de l'eau. Gestion et développement en France. CNRS Editions, Paris

Latour B, Le Bourhis JP (1995) Donnez-moi de la bonne politique et je vous donnerai de la bonne eau. . .Rapport sur la mise en place des Commissions Locales de l'Eau. Centre de sociologie et de l'innovation de l'Ecole des Mines de Paris, Paris