

# Research on Legal Issues of Water Pollution Control in Cities in the Yangtze River Basin

## -- Taking Anqing City as an Example

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### ABSTRACT

As an important ecological barrier and economic zone in China, the Yangtze River Basin has increasingly highlighted the contradiction between the protection and exploitation of its water resources. With the acceleration of urbanization, the problem of urban water pollution has become one of the bottlenecks restricting the sustainable development of the Yangtze River Basin. As an important city along the Yangtze River, Anqing City has certain representativeness and typicality in its water pollution control work. Therefore, this paper chooses to take Anqing City as an example to conduct an in-depth study on the legal issues of urban water pollution control in the Yangtze River Basin.

### KEYWORDS

Yangtze River Basin; Water Pollution Control; Legal Issues; Anqing City.

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## 1. INTRODUCTION

As an important ecological barrier and economic zone in China, the Yangtze River Basin has increasingly highlighted the contradiction between the protection and development and utilization of its water resources. With the acceleration of urbanization, the problem of urban water pollution has become one of the bottlenecks restricting the sustainable development of the Yangtze River Basin. As an important city along the Yangtze River, Anqing City has certain representativeness and typicality in its water pollution control work. Therefore, this paper chooses to take Anqing City as an example to conduct an in-depth study on the legal issues of urban water pollution control in the Yangtze River Basin.

## 2. LITERATURE REVIEW

### 2.1. Current Status of Research in the Country

#### 2.1.1. Macro Policy Study on Water Pollution Control in the Yangtze River Basin

In terms of policy planning and top-level design for water pollution control in the Yangtze River Basin, Fang Ziyun (1998) first proposed that an action plan for water environmental protection in the Yangtze River Basin should be formulated, and emphasized that the plan should be strictly followed to guide water pollution control actions in the Yangtze River Basin. An Zongsheng (2018) argued that a gridded water pollution control strategy should be developed for water pollution management

in the Yangtze River Basin, and took Anhui Province as an example, suggesting that the Yangtze River Basin section in Anhui Province be divided into 41 grids, and then differentiated according to the degree of water pollution within the grids. Qin Peng and Li Ruyi (2012) that the Yangtze River Basin Water Pollution Control is not only a policy level planning and strategy development issues, but also need to be regulated from the legislation, the circular economy concept and watershed control ideas as a guide, the establishment of the Yangtze River Basin Water Pollution Control macro-control of the legal norms and regulations of the system, the Yangtze River Basin Water Pollution Control of the law to improve the process. At the legislative level of water pollution control in the Yangtze River Basin, Wu Guoping and Yang Guosheng (2016) believe that the legislation on water pollution control in the Yangtze River Basin should be based on the perspective of the overall interests of the basin, focusing on the economic and ecological functions of water pollution control in the Yangtze River Basin to be adjusted, and targeting to solve the problems of water pollution control in the Yangtze River Basin. On the choice of water pollution governance model in the Yangtze River Basin, most scholars are against the traditional territorial governance model limited by the jurisdiction of administrative regions, Chen Jin and Li Qingyun (2011) believe that the water pollution governance in the Yangtze River Basin should be to adopt a systematic and comprehensive governance model. Li Qiwei (2018) suggests promoting the transformation of the water pollution governance model in the Yangtze River basin from sectional management to basin community governance, in which the basin community is a social aggregation of the Yangtze River basin government, enterprises, and the public based on partnership and trust relationships and common interests.

#### 2.1.2. Research on Micro-mechanisms of Water Pollution Control in the Yangtze River Basin

Xiao Muhua (2003) firstly proposed to reform and innovate the development direction and way of water pollution management system in the Yangtze River basin. Among them, the reform of the mechanism of the main body of water pollution governance in the Yangtze River basin is the focus of research. For the single Yangtze River basin water pollution governance main body, Dai Shengli and Li Yingchun (2018) targeted the establishment of a dynamically adapted double-loop governance system from the level of the local government of the Yangtze River basin, so as to improve the mechanism of the main body of the local government's governance of water pollution in the Yangtze River basin. Yuan Qun (2013), on the other hand, argues that the key to water pollution governance in the Yangtze River Basin lies in the establishment of a unified, efficient, and centralized comprehensive governance institution responsible for the comprehensive governance of the water environment in the Yangtze River Basin. As for the relationship between multiple water pollution management entities in the Yangtze River Basin, Li Changfa and Mu Hongqiang (2011) proposed the establishment of a consultation and collaboration mechanism between local governments and management departments in the Yangtze River Basin. Zhou, Haiwei and Zhang, Yang (2006) proposed to establish a consultative mechanism among water pollution control entities in the Yangtze River Basin according to their different needs. Different from the consultation mechanism of water pollution control subjects in the Yangtze River Basin, Chen Kun (2011) believes that a coordination mechanism of water pollution control subjects in the Yangtze River Basin should be established, and a Yangtze River Basin Water Pollution Control Coordination Committee should be set up specifically to coordinate the contradictions and disputes between water pollution control subjects in the Yangtze River Basin. In addition, scholars have also carried out in-depth research from the source governance mechanism, social subject participation mechanism and watershed water pollution information sharing mechanism, respectively. Yao Ruihua et al. (2014) proposed to improve the water pollution source governance mechanism for chemical enterprises along the Yangtze River Basin, especially to strictly monitor and manage the pollutant discharges of chemical enterprises along the river. In addition to the pollution of chemical enterprises, Xu Jijun and Liu Zhiwu (2011) believe that the current agricultural surface pollution, mainly pesticides, fertilizers and livestock and poultry farming pollution, will gradually become an important factor to cause water pollution in the Yangtze River Basin, and it should be managed at the source. In terms of the social body participation mechanism,

Tao Jingxian and Yang Xiaoliu (2011) believe that China's water environment monitoring system in the Yangtze River Basin should establish a social body participation mechanism based on third-party monitoring. Dong Zhen (2018) believes that it is necessary to improve the public participation system for water pollution control in the Yangtze River Basin in terms of legislation to establish the legal status of social public subjects, develop scientific public participation procedures and establish effective incentives for participation mechanisms. In terms of the construction of information sharing mechanism for water pollution governance in the basin, Dai Shengli and Yu Xi (2018) put forward the idea of constructing a community of interest for water pollution governance information in the Yangtze River Basin, so as to reduce the information interest game among the governance subjects in the Yangtze River Basin, and to realize the equal sharing of information on water pollution governance in the Yangtze River Basin.

### 2.1.3. Study on the Responsibility of Water Pollution Control in the Yangtze River Basin

Gao Qi (2008) proposed to improve the responsibility system of water pollution control in the Yangtze River Basin in terms of implementing the responsibility of meeting water quality standards in the functional areas of the Yangtze River Basin and the responsibility of handing over the water quality of upstream and downstream entry and exit cross sections. Pan Shaolong (2011) believes that the trial function of the Yangtze River Basin Maritime Court should be given full play to strengthen the judicial responsibility of water pollution control in the Yangtze River Basin. In addition, environmental audit research is also the key to help implement the responsibility of water pollution governance in the Yangtze River Basin. Tang Yang et al. (2018) explore the responsibility of water pollution governance in the Yangtze River Basin from the perspective of environmental auditing, and carefully construct the role mechanism and implementation path of environmental auditing in water pollution governance in the Yangtze River Basin. Xiang Si et al. (2017) believe that the special audit and dynamic audit mechanism of water pollution governance in the Yangtze River Basin should be constructed.

Generally speaking, most of the relevant existing literature in China adopts a static textual analysis method, and there are still some issues with research value that have not yet been explored. For this reason, this project adopts an empirical research methodology, through visits and research, in-depth research and demonstration of existing problems, but also on the problems found in the field research, targeted to put forward feasible and useful countermeasures.

## 2.2. Current Status of Foreign Research

Foreign scholars began to study the problem of water pollution control in watersheds at an early stage, and according to the different perspectives of the study, it can be roughly categorized into the macro-legislation study of water pollution control in watersheds and the micro-mechanism study of water pollution control in watersheds in two aspects.

### 2.2.1. Macro-legislative Study on Water Pollution Control in River Basins

Findlay (1989) firstly proposed to strengthen the control of water pollution in watersheds from the legislative, administrative and judicial aspects. As a supplement, Spencer (1990) thinks that the control of water pollution in watersheds should be strengthened from the perspective of strict criminal liability, and suggests the establishment of the crime of water pollution in watersheds, Edith (2000) thinks that the core of water pollution control in watersheds lies in the systematic management, and that a systematic legal normative system of water pollution control in watersheds should be set up from the perspective of the overall management of watersheds. Macleod (2002) also believes that the establishment of a complete set of legal norms system for water pollution control in the watershed is the key to solving the externalities of water pollution in the watershed.

### 2.2.2. Research on Micro-mechanisms of Water Pollution Management in River Basins

Overseas scholars have conducted in-depth studies on the main bodies of water pollution control in river basins and the rights, obligations and responsibilities they enjoy. For example, Salman et al. (2006) believe that each river basin should establish a specialized river basin water pollution control institution and give it the status of independent river basin water pollution control subject, to ensure that it can independently implement the governance behavior and obtain stable financial resources. In addition, in terms of power attribution, Coel et al. (2002) believe that the unclear ownership of water resources in the basin is the key to the difficulty of effective implementation of water pollution control in the basin, and suggest that a mechanism for clear ownership of water resources should be established in the legislation. Secondly, in terms of enforcement activities of water pollution control in river basins, Kathuria (2006) believes that low standards of water pollution discharge in river basins are the main reason for the worsening of water pollution in river basins, and suggests that the specific standards of water pollution discharge in river basins should be determined by means of administrative licenses according to the specific conditions of water pollution control in different river basins. Yves et al. (2003) further argued that different watersheds should have independent but unified watershed water quality standards and pollutant discharge standards, and emphasized that in the process of watershed water pollution control should follow the principle of "polluter management, the beneficiary to bear". Finally, in terms of judicial activities for water pollution control in the basin, Robert (2014) believes that the environmental justice system in the process of water pollution control in the basin has not played its due role and effect, and suggests that the establishment of legal mechanisms for environmental public interest litigation for water pollution in the basin should be accelerated. In addition, in terms of regulating the governance behavior of other water pollution management related subjects in the watershed, Jerry Hagstorm (1987) proposed that a sound public participation mechanism for water pollution management in the watershed of the Tennessee River Basin in the U.S. on the basis of analyzing the experience of water pollution management in the Tennessee River Basin in the U.S. is the key to the effectiveness of water pollution management in the Tennessee River Basin, and that water pollution management should be established and improved in watersheds nationwide in the U.S. in the future. In the future, the legal mechanism for public participation in water pollution control in watersheds should be established and improved throughout the United States.

However, due to the different national conditions, the specific legislation of foreign countries can not be directly copied and applied, but its related research literature and practical experience still provides some reference for this study.

## 3. STATUS OF WATER POLLUTION CONTROL IN ANQING

In recent years, Anqing City has achieved certain results in water pollution control, but there are still some outstanding problems. Mainly in the following aspects: First, industrial pollution and urban life pollution emissions, high governance difficulties; Second, agricultural surface pollution is becoming increasingly serious, inadequate prevention and control measures; Third, the water environment and ecological protection compensation mechanism is not sound, cross-regional collaboration is not enough; Fourth, the water pollution control laws and regulations are not implemented, the lack of supervision.

## **4. ANALYSIS OF LEGAL ISSUES IN WATER POLLUTION CONTROL IN ANQING CITY**

### **4.1. Insufficient Intergovernmental Cooperation**

As a public good, if we rely solely on market regulation, private supply and government supply, it will inevitably form a "one-upmanship" situation, making it difficult to form a synergy of efforts, which is not conducive to the promotion of regulation, law enforcement and other governance work. From the point of view of natural conditions, China's Yangtze River Basin across a wide range of provinces, but limited by the division of administrative regions, so that the water pollution control work is artificially divided, it is difficult to achieve the goal of "horizontal and vertical chess". Each province, city, county local government and relevant departments only stay in the jurisdiction of the water pollution problems within the stage of governance, will lead to "free-riding" "tragedy of the commons" and other phenomena, is not conducive to the basin from the upstream, midstream, downstream of the holistic point of view It is not conducive to synergistic governance from an upstream, midstream and downstream perspective. In the process of formulating the law, the legislature needs to refine the relevant contents of the cross-regional governance of water pollution in the Yangtze River Basin to ensure that the legal provisions are more operable and scientific in law enforcement practice, and to ensure the effectiveness of government cooperation.

### **4.2. Legal Problems in the Field of Water Pollution Control**

Many provinces and cities in the Yangtze River Basin have established corresponding water source inspection systems in order to detect drinking water pollution problems in a timely manner, but the main body of supervision and inspection is not clear, leading to problems such as uncertainty, crossover and absence of supervisors in practice, which is not conducive to the implementation of supervisory responsibilities. In addition, the "Water Pollution Prevention and Control Law", "Yangtze River Protection Law" and other laws also do not provide for drinking water inspection system, there is a legislative gap, not conducive to the legislative level to provide guidance for the relevant departments, it is difficult to solve the management of overlap in practice, the lack of problems. For example, articles 34, 35 and 36 of the Law on the Protection of the Yangtze River only provide for the protection of drinking water sources from the perspective of drinking water, an important body of water, but do not provide for the main body of supervisory responsibility, legal consequences and other content.

### **4.3. Inadequate Civil Public Interest Litigation System**

There are loopholes in the mechanism of civil public interest litigation incidental to ecological criminal proceedings. According to the judicial interpretations of the Supreme Court and the Supreme Prosecutor's Office, procuratorial organs may, in the course of instituting criminal proceedings, bring civil public interest litigation incidental to the criminal proceedings. However, this type of litigation in practice there are loopholes in the process of operation, specifically, first, the parties convicted and sentenced to leniency of the specific criteria and ecological environment restoration responsibility is not effectively articulated, it is difficult to reflect the "Yangtze River Protection Law" in the "one hand to grasp the restoration of the other hand to combat the" legislative concept, is not conducive to the restoration of the ecological environment and the fight against the law. The work of ecological environment restoration and crackdown on violations of the law do not go hand in hand. Secondly, there is the problem of superimposed execution of public welfare compensation, criminal fines and administrative fines, which is not conducive to the execution work of the judiciary. Third, the lack of ecological and environmental public welfare litigation compensation account is not conducive to the use and disposal of compensation in practice. Fourth, the judicial procedure is not scientific, and it is difficult to maximize the efficiency and quality of civil public interest litigation incidental to criminal

proceedings. Trial authorities should harmonize the relationship between the short trial period for criminal prosecution cases and the urgency of public interest protection in civil public interest litigation cases to ensure that trial proceedings are more efficient.

## **5. LEGAL SOLUTIONS**

### **5.1. Actively Establishing a Mechanism for Synergistic Cooperation among the Management Agencies of the Yangtze River Basin**

On the one hand, communication should be strengthened and a platform for ecological and environmental information sharing and consultation in the basin should be established. Actively promote the construction of a unified ecological environment monitoring system and information sharing system in the basin. Promote the establishment of a cross-sectoral and cross-regional mechanism for joint prevention, control and information sharing on water ecological environment protection in the Yangtze River Basin. Basin management agencies have a basis for collaborative cooperation in many aspects, and the implementation of the Law on the Protection of the Yangtze River will be more conducive to the expansion of basin management agencies to multilateral cooperation, and the construction of a multilateral cooperation and sharing mechanism that is functionally complementary, informationally interoperable, and supervisoryly mutually supportive. On the other hand, to build a scientific think tank for ecological environmental protection in the Yangtze River Basin, each basin management organization has accumulated a large amount of monitoring and scientific research data and results in years of protection work. To adapt to the requirements of basin management in the new period, we need to give full play to the professional advantages of the basin management organizations, integrate scientific research and technical strengths of the whole basin, strengthen cooperation and complement each other's strengths, and build a first-rate team of technical support and experts in ecological environmental protection of the Yangtze River Basin, so that we can work together as a good scientific think tank. We will work together to build a first-class technical support and expert team for ecological and environmental protection in the Yangtze River basin.

### **5.2. Accelerating Supporting Legislation for the Comprehensive Management of the Yangtze River Basin**

The Law on the Protection of the Yangtze River is based on China's national conditions and has made innovations in the institutional mechanism, but some of the provisions are still relatively principled, and there is an urgent need to adopt supporting legislation to further clarify the specific issues of the coordination mechanism of the Yangtze River Basin, such as the form of organization, activation, coordination, and coordination procedures, and at the same time, to clarify the legal consequences of failing to implement the coordination mechanism and penalties, in order to effectively solve the institutional mechanism problems such as the division of the Yangtze River by region and by sector, and so on. In order to effectively solve the problems of regional and sectoral division in the protection of the Yangtze River, the institutional mechanism should be clarified. It is necessary to strengthen the coordination of major matters related to governance planning and protection policies, enhance the systematic, holistic and synergistic nature of the protection of the Yangtze River, and effectively promote the synergistic governance of the upper, middle and lower reaches of the Yangtze River, its rivers, lakes and reservoirs, its left and right shores, and its trunk and tributary streams. At the same time, the legislative issues involved in the Law on the Protection of the Yangtze River will be sorted out, and the concept of "tributaries" will be interpreted in order to further clarify the relevant legal concepts and the basis for the implementation of the Law on the Protection of the Yangtze River. It will also intensify research on environmental technical norms and standards, and expeditiously formulate technical standards for the remediation of river outfalls and other guiding documents, so as to ensure the accurate implementation of the Law.

### 5.3. Establishment of a Comprehensive Law Enforcement System for the Yangtze River Basin

After the implementation of the Law on the Protection of the Yangtze River, a number of basin-based law enforcement agencies in the Yangtze River Basin have begun to jointly carry out law enforcement collaboration, but the authority of such collaboration is insufficient to form a stable and long-term mechanism, so it is necessary to introduce special regulations based on a full demonstration of the necessity and feasibility of establishing a comprehensive law enforcement system in the Yangtze River Basin, so as to provide a good law enforcement system for the further enhancement of the implementation of the Law on the Protection of the Yangtze River. Support. On the one hand, it is necessary to support the departments of natural resources, ecological environment, water administration, agriculture and rural areas, transportation, public security and other departments to crack down on illegal sand mining, fishing and other kinds of illegal behaviors damaging the ecological environment of the Yangtze River according to the law, and to crack down on the hot spots, difficulties and pain points faced by the Yangtze River protection with the law. On the other hand, it is necessary to integrate the law-enforcement forces of the Yangtze River's waterborne public security, shipping, maritime affairs, fisheries and other departments to explore the establishment of a comprehensive law-enforcement team in the Yangtze River Basin, and to grant it the "Comprehensive Law-Enforcement Powers of the Yangtze River" which is limited to river-related law-enforcement powers. In addition, support judicial and administrative organs to further strengthen their coordination and supervision of administrative law enforcement, and urge and guide the relevant law enforcement departments to fully implement the system of public notification of administrative law enforcement, the system of recording the entire process of law enforcement, and the system of legal auditing of major law enforcement decisions, so as to further standardize the fair and civilized enforcement of law and enhance the credibility of law enforcement.

## 6. CONCLUSION

Urban water pollution control in the Yangtze River Basin is a long-term and arduous task that requires the joint efforts of many parties, including the government, enterprises, social organizations and the public. By improving the legal and regulatory system, strengthening judicial protection, promoting multi-sectoral collaboration and enhancing public participation, the effectiveness of water pollution control in Anqing and the entire Yangtze River Basin can be effectively enhanced. In the future, we should continue to deepen the research on the legal issues of water pollution control, explore more scientific and effective legal solutions, and provide a strong guarantee for the sustainable development of the Yangtze River Basin.

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