Environmental Pollution, Justice, and Trans-Boundary Water Management in China

Ke Jian
Environmental Pollution, Justice, and Trans-Boundary Water Management in China

Ke Jian

Associate Professor
Research Institute of Environmental Law
Wuhan University, China
and General Secretary, Committee of Academics
Chinese Association of Environmental & Natural Resources Law

Abstract

Trans-boundary water pollution in China provides an excellent window into many issues that span the nation’s reform efforts. It also illustrates both the inadequacies and improvements in China’s regulatory regime for environmental protection. China’s response to the growing problem of trans-boundary water pollution reflects the challenges that its nascent environmental legal regime faces, and the attempts to resolve trans-boundary water pollution have only been addressed as part of China’s greater endeavours to adapt its administrative structure and legal regime to its rapid transformation. The legal framework of trans-boundary water pollution in China needs to be reformed. This research is focused on analysing and discussing legal relief for victims of transboundary water pollution, measures of water pollution victims’ relief, and their implications in China.
# Table of Contents

1. Background: Water Pollution in China ................................................................. 3
2. Overview: Water Pollution in the Trans-Boundary Context in China .................. 4
3. Case Study: Trans-Boundary Water Pollution in Zhaiwan Village ....................... 6
4. Legal Relief for Trans-Boundary Water Pollution Victims: A Critical Water Justice Issue ................. 7
5. Legal Relief for Trans-Boundary Water Pollution Victims: Traditional and Realistic Dilemma .......... 9
6. Rule of Law: A Foundation for Legal Relief for Trans-Boundary Water Pollution Victims ............. 11
7. Combating Trans-Boundary Water Pollution: A Legal Framework Description ..................... 13
   (1) Constitution ........................................................................................................ 13
   (2) Environmental Protection Law of P. R. of China ................................................ 13
   (3) Law on Prevention and Control of Water Pollution of P. R. China ....................... 14
   (4) Water Law of P. R. of China ........................................................................ 18
   (5) Other Legislation .......................................................................................... 19
8. Regulatory Enhancement and Accountability Construction: An Effective Reaction to Trans-Boundary Water Pollution .................................................................................. 21
   (1) Strengthening Water Pollution Supervision ....................................................... 21
   (2) Coordination of Water-Related Governmental Agencies .................................... 22
   (3) Empowering River Basin Regimes ................................................................ 23
   (4) Forging Governments’ Accountability for Trans-Boundary Water Pollution Management ... 24
9. Water Governance: A Fundamental Resolution to Legal Relief for Trans-Boundary Water Pollution Victims ........................................................................................................ 27
   (1) Access to Information ...................................................................................... 28
   (2) Public Participation ......................................................................................... 30
   (3) Access to Justice and Legal Aid for Trans-Boundary Water Pollution Victims .......... 32
   (4) Citizen Enforcement and Public Interest Environmental Litigation .................. 35
10. Environmental Pollution Insurance: A Supplementary Market Solution to Legal Relief for Trans-Boundary Water Pollution Victims ................................................................. 37
Concluding remarks .............................................................................................. 38
Acknowledgements ............................................................................................. 39
1. Background: Water Pollution in China

China is one of the most water deficient countries in the world. China has the second lowest per capita water resource in the world, less than one-third of the global average. Moreover, China’s water is unevenly distributed geographically. More water is available in the south than in the north, with the water resources in the south amounting to 80.9 percent of the country’s total. Wide fluctuations in precipitation from year to year, including frequently occurring drought and wet years, contributes to serious water disasters in China. The disproportionate availability of water has aggravated China’s water crisis.

Ever since the Chinese leadership began a series of economic reforms in 1978, China’s rapid economic growth has made it the world’s third largest economy. At the same time, this growth has wrought environmental havoc as a result of neglected environmental protection. While rapid economic development, industrialization and urbanization over the past three decades have lifted hundreds of millions of Chinese out of poverty, it has also created tremendous pressures on the environment.

Rampant water pollution, which mirrors the vigorous economic growth and unchecked industrial development, worsens the water situation. Most rivers and fresh water lakes now face the challenge of pollution. Water scarcity problems associated with pollution have now extended to many parts in China. For example, unbridled municipal and industrial discharge into water bodies has left China’s lakes and rivers too polluted to use in agriculture or industry, endangering the health of people who rely on surface water for drinking, cooking and cleaning. According to the OECD environmental protection report, water pollution has been increasingly causing serious problems of drinking water and water-related diseases in China.¹

According to a World Bank study,² the primary sources of water pollution are discharges of industrial and municipal wastewater, followed by agricultural runoff from chemical fertilizers as well as pesticides and animal manure, and finally solid waste leaching. The Report on the State of the Environment in China 2006, issued by the State Environmental Protection Agency,³ reveals that amongst 745 water sections under the national surface water quality monitoring program, 40% met Grade I–III national surface water quality standards, 32% met Grade IV–V standards and 28% failed to meet Grade V standards. The main pollution indicators were permanganate, ammonia, nitrogen and petroleum. Water categorized as Grade IV or V renders the river water unsuitable even for industrial or agricultural use.⁴

China’s water pollution trends are threatening economic growth, watershed ecosystems and human health. The deteriorating environment has directly resulted in heavy economic losses in China. For example, China’s first research report on “Green National Economy”, done by the Chinese Academy for Environmental Planning and the National Bureau of Statistics, indicates that China may have suffered a total loss of $64 billion from environmental pollution in 2004, or more than 3.05 percent of the country’s gross domestic product (GDP).⁵
For Chinese people, the most frightening consequence of water pollution is the range of the health crisis plaguing local communities from polluted drinking water. As industrial, municipal and agricultural water pollution intensifies China’s mounting water quality crisis, escalating pollution has increased the emergence of disease and environmental health problems in China. While a large percentage of China’s urban population has access to tap water supply, the percentage of tap water availability is significantly lower in rural areas. Particularly, polluted water threatens the health of a large and vulnerable rural population. The relevant data indicate that more than 300 million rural citizens, about a quarter of the country’s total population, lack access to clean drinking water.6

Health research in China has linked water polluted by arsenic, mercury and cadmium to a high incidence of birth defects, cancer, and kidney and bone disorders in populations near many major rivers and lakes. As the magnitude of the impact of polluted water on human health in China is alarming, there is an urgent need to strengthen social mechanisms through law and regulation that governs China’s precious fresh water resources.

In addition to the terrible health impact, water pollution also incurs agricultural losses, sparking protests against industries by farmers who have lost the use of land and water. There are increasing environmental-related protests in China, many of which are most likely related to water degradation. The central government has been motivated by the realization that the gravity of environmental problems in China could lead to social and political instability.7

The global context is that freshwater is a finite and vulnerable resource, essential to sustain life, development and the environment.8 Due to factors such as population growth, industrialization, and urbanization, global water use has been rising at a great rate over the past century. Sustainable, reasonable and equitable water resource utilization and decision-making is crucial around the world. The water decade from 2005 to 2015, declared by the UN General Assembly, provides an opportunity for coordinating efforts to expand access to water and sanitation as set forth in Agenda 21, the UN Millennium Declaration, the Johannesburg Plan of Implementation, and the 12th and 13th sessions of the Commission on Sustainable Development.

2. Overview: Water Pollution in the Trans-Boundary Context in China

The effects of the severe water pollution have by no means been confined to areas within administrative borders. All of China’s major river systems cross provincial boundaries and trans-boundary water pollution is a widespread and rampant phenomenon. China’s seven main river basins are all cross-provincial and cover a total area of 4.37 million square kilometers, amounting to 44% of the total territory and involving 29 provinces, municipalities and autonomous regions. Located in these areas are 88% of the country’s population and 80% of its arable lands. Meanwhile, The 2005-06 national environmental safety overhaul found that of 7,555 chemical and petrochemical projects surveyed, 1,354 were located on the banks and shores of rivers, lakes, and reservoirs, 2,489 were adjacent to cities or areas with high population concentrations, 535 were located on major tributaries of key rivers, and 280 were located on the upper reaches of drinking water sources. According to estimates, more than 13,000
petrochemical factories out of the national total of 21,000 were built along the Yangtze and Yellow rivers, two of China’s major water arteries, upon which tens of millions of Chinese depend for their drinking supplies and livelihood. Environmental pollution from upstream facilities poses health threats to many local people along the rivers, who rely on the polluted water for drinking and irrigation.\(^9\)

Large lakes in China also extend beyond one specific provincial jurisdiction and suffer from serious water pollution as well. For example, Tai Lake is both a famous sightseeing destination and a prosperous economic region. Millions of residents around the lake rely on Tai Lake for supplies of drinking water. However, the area’s environmental infrastructure has been unable to keep pace with economic expansion and algae blooms have been reported annually since the early 1990s due to the existence of nearly 20,000 small-size chemical companies.

The water quality of river basins or lakes beyond one administrative jurisdiction in China typically reflects the severity of the pollution situation in China. The monitoring data from “2006 Report on the State of the Environment in China”,\(^10\) which is based on the 408 monitoring sections of 197 rivers on the seven major river basins under national monitoring program, shows that seven major rivers of China - Yangtze River, Yellow River, Pearl River, Songhua River, Huai River, Hai River and Liao River - have been seriously polluted to different degrees.

Specifically, only 4% met the Grade I National Surface Water Quality Standards, 28% met the Grade IV-V National Water Quality Standards and 26% failed to meet the Grade V standards. In 2006, the data from 98 provincial trans-boundary sections under the national monitoring program of the seven rivers also showed that only 4% of sections met Grade I, 9% of sections met Grade V and 26% of sections failed to reach the lowest grade.

Tributaries are also subject to serious pollution. The Report on the State of the Environment in China 2006 reveals that monitoring data from the 27 major lakes or reservoirs under the national water quality monitoring program shows that 2 lakes or reservoirs (accounting for 7%) met Grade II water quality standards, 6 (22%) met Grade III water quality standards, 1 (4%) met Grade IV quality standards, 5 (19%) met Grade V water quality standards and 13 (48%) failed to meet Grade V standards.

The water quality of trans-boundary lakes such as Chao Lake and Tai Lake are at levels of Grade V standards or lower. The major pollutants discharged into the lakes include nitrogen, phosphorus, petroleum and heavy metals. Polluted tributaries also contribute to the mainstream water pollution. For example, among the 87 sections of the inflowing rivers under the national water quality monitoring program in Tai Lake 2006, the percentages meeting the surface water grades from I to V are 0%, 1%, 19%, 31% and 18% respectively, while 31% of the sections failed to meet the lowest standard.

Despite the serious pollution, the rivers and lakes are still being used as sources of drinking water for millions of residents in the surrounding regions. Friends of Nature\(^11\) revealed that one-quarter of the Chinese population, approximately 320 million people, are drinking unsafe water.\(^12\)
Unclean drinking water has taken a heavy toll on public health in China, and is undoubtedly one of the most urgent issues in the country. Long-term exposure to toxic drinking water has resulted in increasing rates of chronic diseases such as stomach and liver cancers. The rising mortality rates for stomach and liver cancers are proved to be associated with high levels of inorganic compounds in the local surface water bodies. For example, the village of Huangmengying, Shenqiu County, Henan Province, is located along the Shaying River, which is the biggest tributary of China’s most polluted river, the Huai River. Since the early 1990s, the water in the Shaying River had begun to discolor from the severe pollution, and there has been a dramatic increase in the occurrence of colitis, as well as rectal and esophageal cancers in Huangmengying. Between 1990 and 2004, 114 residents died of cancer.

The Ministry of Health notes a disturbing trend of abnormally high rates of tumors, cancers, spontaneous abortions and diminished IQs among populations living near polluted rivers and lakes. The scientific evidence explains the abnormally high rate of illnesses in China’s “cancer villages” located along some of China’s biggest and most polluted rivers and lakes. The problem is especially acute in rural areas, where local residents lack the necessary infrastructure to sanitise drinking water and 90 percent of them do not have any medical insurance.

3. Case Study: Trans-Boundary Water Pollution in Zhaiwan Village

The Bai River is a typical trans-boundary river which flows through two provinces, Henan Province and Hubei Province in central China. The river runs 300 kilometres in upstream Henan Province and 23 kilometres in downstream Hubei Province before it runs into the Han River. Bai River is a main tributary of the Han River, which is one of the biggest tributaries of the Yangtze River. Zhaiwan Village, located in Zhuhe Town, Xiangfan Municipality, Hubei Province, is adjacent to Nanyang Municipality, Henan Province, and is the first village of downstream Bai River within Hubei Province. Zhaiwan Village is one of 33 villages in Xiangfan’s jurisdiction along the river. There are about 700 families with around 3,400 inhabitants in the village. For the people in Zhaiwan villages, water from the river is used for drinking, household use and irrigation on a daily basis.

Over the past two decades, industries have been booming in the areas upstream in Henan Province. There are state-owned enterprises, small village-owned factories, town-owned factories and privately owned factories spread along the Bai River. The industries include pulp and paper mills, tanneries, dye works, chemical plants and breweries. Most of the factories lack the necessary facilities to deal with waste water and simply discharge the untreated waste water directly into the river. This waste water contains pollutants such as ammonia, nitrogen compounds, potassium permanganate and phenols that exceed the relevant Chinese waste water discharge standards. As a result of the growth of industry, the water quality in the Bai River has been worsening since the early 1990s, and the water quality of the river has fallen below the lowest China’s surface water standard (Grade V).
The polluted water passes through farmland and villages along the river, contaminating the soil and crops, and destroying the livelihoods of the farmers, as well as posing a serious health risk to the villagers who obtain drinking water from the river. Stomach, liver and esophagus cancers are at an abnormally high rate in the polluted villages. According to the investigation, more than 100 residents in Zhaiwan village have died from illnesses, particularly cancers. In comparison with the 32 other villages in Xiangfan, the villagers in Zhaiwan Village have struggled to address this danger. The villagers have repeatedly complained about their plight to the local, provincial and central governments while their sad stories have been unveiled through China’s mainstream media and also through media overseas. Some journalists have named the village a “cancer village” due to the abnormally high rate of cancers caused by the polluted drinking water. It has become a widely known case of water pollution in China.

With the help of the governments, the World Bank, the environmental NGO ‘Green Han River’, and media, a solution was developed by digging a 120-metre deep well to provide a cleaner source of drinking water in Zhaiwan Village.

4. Legal Relief for Trans-Boundary Water Pollution Victims: A Critical Water Justice Issue

Due to the introduction of reform in 1978, China’s economy has developed at a remarkable rate over the past three decades. As a result, economic benefits and living conditions of Chinese people have improved dramatically. However, China’s economic development is geographically uneven. There are also some critical social and environmental issues arising from the development. One of the issues is the increasing economic gap between different regions, rural and urban areas, and rich and poor, as the public are increasingly becoming aware of social disparity and injustice arising from economic development. In particular, the public has started to criticize the public policies that reinforce the social divide. As a response, the Chinese central government and the Communist Party proposed the new Sharing Achievements of Reform Together policy. However, the public are not conscious about the costs of economic development, such as environmental pollution and ecological degradation, from the perspective of social justice.

The damages resulting from trans-boundary water pollution for rural residents are a typical case. As one of the essential life-sustaining elements, drinking water is a common good that should not be denied anyone. Safe water supplies and water sanitation should be the duty and responsibility of governments. With regard to trans-boundary issues, a right to the universal access to those goods and services in virtue of the rule of law should be established. Nowadays, the discharge of pollutants into trans-boundary river basins of upstream regions has wrought environmental havoc in downstream jurisdictions and created inequities in distribution and injustice in China. A sense of injustice over the disproportionate burdens of water pollution damages and human health in the course of economic development is driving Chinese people to voice environmental concerns through both official channels and unauthorized protest.

Although the issue of safe drinking water has attracted much attention through the media, the Chinese government, the public and even the victims tend to attach more importance to its techno-scientific aspects in comparison with its social justice aspects. In other words, to relieve
the water pollution victims, the final solutions usually rely on more investment, new technology, and better infrastructure to seek alternative water sources or purify the polluted water by means of governmental coordination, mediation and conciliation rather than through any judicial adjudication.

Although this can improve the drinking water facilities and utilities in rural areas, victims have not been granted sufficient relief for their damages. Even though the Zhaiwan villagers now have a source of safe drinking water, the Bai River remains contaminated, even though upstream Henan provincial government have taken more stringent oversight measures. In Xiangfan’s jurisdiction along the river alone, there are 80,000 rural residents in 33 villages relying on Bai River for drinking water sources, and there are still many villages both in Henan Province and Hubei Province in danger by consuming contaminated water.

The issue of how to use and distribute water equitably, effectively and efficiently must be addressed in any society. However, water pollution, tends to have a disproportionately detrimental impact upon socially, economically and geographically marginalised groups. In other words, these groups are more likely to suffer from harm, particularly health related harm, due to poor drinking water infrastructure. From a legal perspective, water justice, both as a political and as a legal concept, has not been commonly accepted in China. Environmental justice has implications for legal theory and practice, and can push legal change to respond to the drinking water issue in the trans-boundary context in China, both politically and technically.

Since water is essential for life, it is indispensable for everyone, human rights to access safe drinking water should be set up in legislation and be protected by means of effective legal enforcement. As the Chinese legal system develops, recognition of rights in environmental law should protect pollution victims and also, in the long run, reinforce environmental protection.

Industrialization and urbanization has intensified use of rural land and water resources in China. However, the burdens of environmental pollution are likely to be borne in a disproportionately way among different social groups and communities in China, and socially and economically disadvantaged groups and communities, such as the villagers in Zhaiwan Village, who extract drinking water from polluted rivers and lakes, are more likely to suffer from environmental pollution. In one sense, disadvantaged people are the biggest stakeholders of environmental problems. For them, the environment is not only a moral discourse but also substantive interests of property and health.

Justice therefore demands that these people be involved in local, regional, national and even international decision-making that affects their health, values, land use, customary management, social arrangements and rights pertaining to water. That is, trans-boundary water management must involve the disadvantaged in the decision-making process and their prior informed consent on issues impacting their basic human rights. Although the situation does not necessarily mean that all the decisions are made by them unconditionally, it does mean that all stakeholders including the disadvantaged people should be given the legal rights to take part in decision-making. In China, it not only promotes administrative supervision, but is also conducive to combating special interests that have resulted from the combination of endemic protectionism and private interests.
5. Legal Relief for Trans-Boundary Water Pollution Victims: Traditional and Realistic Dilemma

To protect economic resources, Chinese leaders, both ancient and modern, have prioritized water management, and particularly the use of large infrastructure projects and top-down rule-making.\[^{15}\]

Over the course of China’s history, dykes and water diversion projects were developed nationwide.\[^{16}\] Ancient China attached much important to water management, mainly due to its long agricultural history. In Karl Wittfogel’s famous study, *Oriental Despotism*, he identified centralized imperial control of water as the source of China’s persistent absolutism.\[^{17}\] In Wittfogel’s view, Chinese civilizations, which he termed ‘hydraulic societies’, came from large-scale water management activities, in particular irrigation works, which was fundamental for an agricultural society. Based on the practice of centralized water control, he explained the state formation and its power structure. Wittfogel argued that water management practices contributed to the formation of the country’s centralized power structure and stressed the administrative order’s function from top down. The theories, in some sense, give a reasonable explanation for the Chinese people’s attitude to the court and judicial systems.

Today, massive state development dominates water resource management. China continually expands its irrigated acreage in arid regions of the north, plans new trans-basin diversions, and constructs large new projects. Although water projects can help address some water issues, the excessive reliance on water projects can not address all of the water problems and can even in some cases contribute to pollution and degradation of water quality.

This can be shown in the case of Zhaiwan village. Although the damage resulting from the polluted drinking water was not mentioned, the villagers seemed to be satisfied with the resolution. According to the governments’ plan, more safe drinking water projects, which are aimed to solve the drinking water problems of the other villages in Xiangfan along the Bai River, will be initiated with a total investment of 32 million Chinese Yuan. However, the results of these projects are still difficult to predict. Some argue that the trans-boundary water pollution problems remain unsolved. Although these water projects can certainly improve quality of the drinking water for the villagers, they do not necessarily ensure that the drinking water is safe.

The project-based solutions reveal the overt faith in the power of science and technology. In contrast to their Western counterparts, Chinese people regard judicial tribunals as the last means to solve disputes. In other words, Chinese people avoid resorting to the judicial bodies to solve disputes if there is another way to solve it. Compared to recourse to judicial resolutions, water projects are regarded as an expedient and convenient resolution to deal with water-related disputes in contemporary China. As a result, the overriding dominance of techno-scientific solutions to solve the trans-boundary water pollution issue has contributed to maintain largely unobservable social justice aspects of trans-boundary water pollution issues. It directly results in an indifference of the people to critical justice issues and hinders the development of legal mechanisms to solve a problem. In contrast to the attention given to water projects as a solution to the problem, the development of social mechanisms to address water issues has been
neglected and ignored – even though techno-scientific solutions are insufficient to address the problem.

The project-based solution also reveals that the governments, rather than the courts, consciously or unconsciously play a pivotal role in resolving trans-boundary water pollution disputes. China’s management of water development, utilization, conservation of water resources and flood control results in intense inter-regional conflicts that have steadily increased over time. As a result, top-down governmental venues and administrative processes were a logical and inevitable choice for resolving water disputes in China, as opposed to the courts and judicial procedures in Western countries.

In the case of Zhaiwan village, the local residents reported and complained about the pollution to the local governments. However, the local governments in Xiangfan could not assist, as the sources of pollution sources were located in Henan Province. The local governments in Xiangfan tried unsuccessfully to coordinate with the Nanyang governments to resolve the issue. And the local government in Henan Province was also unable to control the pollution. The disputes even reached the Hubei provincial government and the central government in Beijing. Some high-level governmental officials suggested that Henan Province should strengthen environmental supervision over the polluting enterprises. However, the villagers still preferred to seek relief from the governments rather than to bring a suit against the polluters for damages. It reveals that Chinese people prefer to rely upon administrative powers and mechanisms to solve their disputes rather than to rely upon judicial tribunals.

In contemporary China, the preference to seek recourse from governments to settle water disputes is logically consistent with the legal nature of water ownership. Under China’s Water Law, two categories of water resources ownership exist: state ownership and collective ownership. The law provides for general state ownership of all water resources, with the exception of the collective ownership of water in ponds and reservoirs owned by "agricultural collective economic organizations". Based on this system, the governments protect legitimate rights and interests of individuals and organizations to develop and utilize water resources consistent with the law. Some scholars have argued that the state has retained absolute control of water through the involvement of state enterprises in large diversionary projects. The result is that water has remained intensely managed by imperial bureaucracies. In comparison with rather weak judicial bodies, governments are strong enough to deal with the complicated trans-boundary water pollution issues and disputes. In fact, the recent efforts to reform the legislation and to promote the enforcement of water pollution law reflect the long tradition of resolving disputes out of court. For example, the 2008 LPCWP Amendment technically uses the term “Drinking Water Safety”. It logically demands more governmental administrative regulations instead of environmental justice concerns and judicial adjudications.

Following the tradition of resolving disputes out of court, the current water pollution disputes are typically settled through mediation with the regulators, polluters, and victims. Based on its consensus-oriented culture, negotiation and mediation rather than adversarial processes are preferred dispute resolution mechanisms in China. That continues today when environmental concerns collide with economic development goals. Environmental disputes are usually subjected to mediation, administrative arbitration proceedings, and judicial efforts to craft a settlement before a final court judgment is pronounced. The preference is also reflected in the
current Chinese relevant legislation, such as 2002 Water Law Amendment and 2008 Amendment of Law of China on Prevention & Control of Water Pollution (see Appendix). In the legislation, administrative coordination, conciliation and mediation are regarded as fundamental measures to solve water-related disputes. Further, investigation by the All-China Environmental Federation (ACEF) shows that less than 1 percent of the 100,000+ disputes regarding environmental violations reported in 2006 reached the courts.

The severity of China’s trans-boundary water pollution problems indicates the failure of legal systems to adequately alleviate the toll that water pollution is taking on the country’s environment and on the health of its people. Although the traditional Chinese approach to resolving societal conflicts has its virtues, it certainly impedes the development of the rule of law in China. In some sense, the issue is deeply challenging the existing judicial systems in China. Given China’s problems with the decentralization of environmental enforcement powers, negotiation easily falls prey to institutional political pressures that need an overarching decision-maker to impose a binding decision. Absent that, local political pressures and the inequality of bargaining power between the parties are likely to dominate the negotiation and mediation process. Obviously, negotiation and mediation at the provincial or local level are not enough to resolve trans-boundary water pollution disputes.

In the trans-boundary context, even though water pollution victims at present can hardly rely successfully on the courts to redress their grievances due to its weakness, the judicial tribunals for trans-boundary water pollution disputes need to be drastically improved. The current preference for negotiation and mediation is incapable of sufficiently addressing problems where bureaucratic tensions and endemic protectionism have resulted in a system that is unmistakably adversarial in nature. While the settlement of trans-boundary disputes by the next higher government body may be preferable under the Chinese system, the administrative process needs to open itself to the participation of the affected individuals as well as participation by civil society.

6. Rule of Law: A Foundation for Legal Relief for Trans-Boundary Water Pollution Victims

In the 4,000 years of traditional Chinese civilization, Confucianism, which emphasized classical education and moral consciousness within a structured, societal framework to promote social harmony, succeeded Legalism, which relied on formal legal codes to enforce social order. This transition produced a unique tension in Chinese society, for the “rule of man” of Confucianism is philosophically antithetical to the “rule of law” espoused by Legalism. As a result, the concept and practice of law has never played a role as significant as they have occupied in western history. With regard to water issues, early Chinese tradition did not rely on a legal framework per se for managing water resources. For a long time, water uses mainly relied on custom and privilege in China, and water regulation has been a part of its peculiar legal, administrative and political framework. As a result, water disputes were settled by governmental procedures rather than judicial tribunals.

Cultural traditions and their impact can last a long time. Although the Chinese Constitution now provides for a judiciary that is independent from other branches of government, the
independence is, in reality, subject to a variety of external constraints. Fundamental judicial obstacles such as lack of judicial independence, efficiency and justice, in a broader sense, constitute intimidating obstacles to providing judicial relief for trans-boundary water pollution victims. The interferences outside of law directly debase some basic requirements of the rule of law, such as equity, predictability and certainty. Furthermore, it also destroys trust in the judicial system. Although some civil procedures in some Chinese legislation favour water pollution victims, such as the General Principles of Civil Law, Law on Prevention and Control of Water Pollution, trans-boundary water pollution victims usually resolve their disputes other than by litigation. In contrast, environmental disputes are addressed by the judicial system in countries such as the United States and Australia. This is partly due to the fact that many people in those countries rely on litigation to solve all types of disputes, and partly due to the fact that the more sophisticated court system makes litigation more palatable.

Since the 1980s, China has formally embraced the “rule of law” directly in line with western notions of the principle. Notably, the change has resulted in the creation of a legal framework in the field of environmental protection. The transformation of the rule of law is still underway in China. Although the development of environmental law in China has, to some degree, made great progress by learning from the environmental legislation in western countries, Chinese environmental law, in comparison with its western counterparts, lacks the authoritative and autonomous powers it deserves.

However, water resources need not be a source of conflict. Instead, they can be a catalyst for cooperation. To some degree, the magnitude of trans-boundary water pollution prompts us to challenge and rethink the rule of law in China. Basically, the rule of law requires that the law be transparent, fair, independent, enforceable and respect basic human rights.

Some other judicial defects are also revealed in trans-boundary water pollution cases. For example, local upstream governments may influence a case in a court simply because that local government controls the funding for those local courts. The trans-boundary water pollution victims also complain about the lack of judicial enforcement, inexperienced lawyers and judges, and the intervention of external political and economic factors.

The challenges call for judicial reforms to enhance its transparency, authoritativeness, efficiency, independence and expertise in environmental law. In this respect, the recognition of the importance of trans-boundary environmental problems and the need for strong judicial mechanisms and legal evolution may result in new creative regulatory strategies that other legal systems have not been able to consider.

As China is in transition from a society ruled by people to a society ruled by law, powerful government intervention may be needed to assure local enforcement of the law, but sometimes intervention is likely to be non-legal and may erode the autonomy of the law. The endeavour of the rule of law for environmental protection is paradoxical, especially in the context of trans-boundary water pollution cases.
7. Combating Trans-Boundary Water Pollution: A Legal Framework Description

The Chinese government has attached much importance to environmental legislation over the past three decades. In the midst of a transition towards the rule of law, environmental legislation is a reasonable choice in China. Chinese environmental law can date back to the promulgation of the trial environmental law, the Environmental Protection Law in 1979. Over the past three decades, China has enacted a series of environmental laws and regulations to address environmental issues comprehensively and sectorally. Since 1979, China’s national legislature has enacted 26 laws focusing on or related to environmental protection, according to Mao Rubai, former chairman of the Environment and Resources Protection Committee of the National People’s Congress. Of these, 11 have been adopted since 2000. Backed by more than 2,000 regulations and decrees, these laws have established a legal framework for China’s green measures aimed at sustainable development. At the same time, a lot of local environmental legislation has been enacted at the provincial and municipal levels. In response to water protection and prevention and the control of water pollution, China has passed a great number of relevant laws and regulations both at the national and local levels.

Among the laws addressing water pollution, there are two types of laws: laws that include provisions indirectly relevant to water pollution issues and laws specifically related to water pollution.

(1) Constitution

The Constitution is recognized as the mother law and forms the foundation of all other laws in China. Several provisions regarding environmental protection were added to China’s constitution in 1982. These provisions are implicitly relevant to water pollution by providing the language of protection and guiding principles for environmental protection. Article 9 of the Constitution provides the basic system of natural resources management - including ownership, utilization and protection of water resources. Article 26 provides that the State protects and improves the living and ecological environment, and prevents and remedies pollution and other public hazards. In addition, Article 21 provides that the health of citizens is the state’s responsibility. However, China’s Constitution does not provide a means for citizens to assert constitutional claims.

(2) Environmental Protection Law of P. R. of China

Environmental Protection Law of P. R. of China is a leading law for environmental protection in China. The trial Environmental Protection Law (EPL) was originally enacted in 1979, and was amended in 1989. It lays down a basic legal framework for addressing environmental issues comprehensively by creating a legal framework of fundamental principles to guide environmental protection in general. These provisions are applicable to water pollution issues.

Article 1 of EPL clearly pronounces its purpose “to protect and improve the human environment and the ecological environment, prevent and control pollution and other environmental hazards, safeguard people’s health and promote the development of socialist modernization.” Under the
legislative purpose, the law sets forth the “polluter pays” principle, meaning that those who pollute will be held financially accountable for the consequent remedial actions required.

In the text, EPL declares that environmental protection is a right and an obligation for all citizens in an abstract way. However, the law fails to provide details on its implementation. Furthermore, the law stipulates that local governments are held responsible for environmental quality within their jurisdictions. The law also prescribes essential environmental legal institutions such as environmental impact assessment and “three synchronizations”.27

In spite of the above mentioned provisions, EPL fails to offer a strong regime for addressing trans-boundary pollution issues, including trans-boundary water pollution disputes. Trans-boundary pollution is only discussed in Article 15, which provides for the prevention and control through negotiation between the affected local governments or by decisions of the people’s governments at a higher level. The law does not take into consideration the requirement that upstream jurisdictions must not violate the standards of downstream jurisdictions.

Aimed to protect environmental pollution victims, Article 41 provides that a unit that has caused an environmental pollution hazard shall have the obligation to eliminate it and compensate to the unit or individual that suffered direct losses. A dispute over the liability to compensate or the amount of compensation may, at the request of the parties, be settled by the competent department of environmental protection administration or another department invested by law with power to conduct environmental supervision and management. If a party refuses to accept the decision, it may bring a suit before a people’s court. The party may also directly bring a suit before the people’s court. If environmental pollution losses result solely from irresistible natural disasters which cannot be averted even after the prompt adoption of reasonable measures, the party concerned shall be exempted from liability. Article 42 extends the valid period of civil litigation for environmental pollution cases to three years in comparison with the general provision 1 year litigation period.

However, EPL appears to prioritize economic growth over environmental security. The guiding principle of the law lists economic growth and environmental protection in parallel, effectively weakening the law’s power as a uniquely environment law and causing ambiguity when economic growth and environmental protection are in conflict. Even worse, economic growth is always prioritized over environmental protection in practice. Revising the Environmental Protection Law will help to clarify the duties of local governments and agencies authorized to protect the environment, holding them responsible for environmental protection and holding them accountable for abusing their power to interfere with environmental law enforcement. At the previous three annual sessions of National People’s Congress, China’s top legislature received a total of 35 bills from more than 400 lawmakers requesting revision to the law, which accounts for almost half of all the proposals on environmental legislation.

(3) Law on Prevention and Control of Water Pollution of P. R. China

The Law on Prevention and Control of Water Pollution of P. R. China (LPCWP), initially promulgated in 1984 and amended in 1996 and 2008 (see Appendix), is particularly relevant to water pollution issues.
In comparison with the 1984 LPCWP, which focused on prevention and control of water pollution from industrial sectors, the 1996 LPCWP tried to address trans-boundary water issues in several respects. The law requires the making of unified plans on the basis of river basins instead of administrative regions although it is very general and aspirational in some sense. Pursuant to the law, SEPA is designated to be charged with developing watershed plans to control pollution in conjunction with other relevant ministries and departments, and the plans are to be submitted to the State Council for approval. The fact that the State Council may approve the plan, however, does indicate that involvement by the central government could force provinces to take their neighbours into consideration.

However, an inconsistency in the drafting of this provision also confers the power on provincial environmental protection bureaus (EPBs), Ministry of Water Resources (MWR), and provincial people’s governments to develop watershed plans where trans-boundary water pollution occurs. Moreover, these trans-boundary plans are to be developed “in light of actual local conditions”, a questionable term that would appear at best to give provinces discretion in determining which commitments are feasible for them to make. Trans-boundary plans are to be approved by the State Council or the provincial government. The requirement for an integrated water plan is absent, and at most the provision appears to embody only a requirement to consult. The language of the provision does not mandate trans-boundary coordination and cooperation, and appears to allow for decision-making to rest within the administrative boundaries of each province. One provision within the law raises the possibility of a system of watershed-wide water quality standards that could potentially alleviate trans-boundary pollution problems. Article 17 declares that SEPA, the MWR and provincial people’s governments may develop water quality standards for the entire watershed that would be binding within each province of the watershed. These standards are subject to negotiation by the parties, and provinces are not legally bound to submit to watershed-wide standards. The primary avenue for resolving trans-boundary disputes under the 1996 LPCWP is by consultation and mediation through the people’s governments, which replicates the language in the EPL.

As a result of the severe water pollution across China and frequent occurrences of water pollution accidents, LPCWP was amended again in 2008. With regard to trans-boundary water pollution issues in the 2008 Amendment, although there is no new explicit change, a concerted effort to enforce the existing environmental laws on water pollution would be conducive to reduction of the amount of wastewater discharges that pollute downstream regions. More stringent administrative regulation to combat water pollution is provided by the 2008 LPCWP. The provisions prohibit water pollutant discharge activities in excess of the prescribed standards (Article 9), strengthen EIA and the three synchronizations (Article 17), define the total amount of water pollutants and permit requirements for polluters (Article 20), state the water pollutant discharge fees (Article 24), grant SEPA the power to release national water pollution information (Article 25), and raise the amount of fines and penalties for infringement.

In particular, drinking water safety is highlighted in the Amendment. In response to frequent high-profile water pollution accidents and significant public concern about drinking water safety, more detailed provisions on protecting drinking water sources have been included in the Amendment. Compared with the 1996 WPPCL, the 2008 version contains many innovative concepts and mechanisms that can be summarized in the following aspects:
Change of legislative purpose. Following Article 1 of EPL, Article 1 of WPL recognizes the importance of “safeguarding human health” while promoting “socialist modernization.” However, reality has shown that conflicts of interest favouring “socialist modernization” exist at both the national and local enforcement levels. According to Article 1 of LPCWP (1984 and 1996): “This Law is formulated for the purpose of preventing and controlling water pollution, protecting and improving the environment, safeguarding human health, ensuring the effective use of water resources and facilitating the development of socialist modernization. However, the tone in Article 1 of LPCWP (2008) changes: “This Law is formulated for the purpose of preventing and controlling water pollution, protecting and improving the environment, safeguarding the drinking water safety and enhancing the comprehensive, harmonious and sustainable development of economy and society.” In the theory of environmental law, “protecting and improving the environment, safeguarding human health” is more related to equity issues while ensuring the effective use of water resources is more related to efficiency issues. As a result, the two elements were given equal importance in the 1984 and 1996 LPCWP. In the 2008 LPCWP Amendment, the expression “ensuring the effective use of water resources” was removed. This means that equity issues are attached more importance. Meanwhile, safeguarding the drinking water safety is stressed and added to the purpose of the legislation.

“Protecting drinking water sources first” as a guiding principle. Article 3 of LPCWP (2008) prescribes that for the purpose of prevention and control of water pollution, such principles should be followed as giving priority to prevention, combining prevention with control and preventing and controlling in an all-round way, protecting drinking water sources first, rigorously controlling industrial pollution and urban domestic pollution, preventing and controlling agricultural non-point pollution, vigorously promoting the construction of ecological management projects, and preventing, controlling and reducing water pollution and ecological damage.

Special chapters have been added to the Amendment for drinking water safety, such as the chapter on “Protection of Drinkable Water Sources and Other Special Waters”. This chapter includes 10 articles, which provide inter alia for zoning and categorical management of drinking water protected areas. In response to the obligations, the liabilities chapter provides the administrative liabilities for infringement. Drinking water source protection zones are classified into Grade I and Grade II, which allows for officials to specify a certain area at the periphery of a drinking water source protection zone as a quasi-protection zone—creating a larger buffer for protection. The new law mandates that no pollution outlet is to be set up in a drinking water source protection zone. Moreover, it is prohibited to build, renovate, or enlarge any construction projects irrelevant to water supply facilities and the work of water resource protection in a Grade I drinking water source protection zone. The law also prohibits the building, renovating, or enlarging of construction projects that discharge pollutants in a Grade II drinking water source protection zone.

Under the 2008 Amendment of LPCWP, articles 85 to article 89 are civil liability provisions relevant to relief for water pollution victims. Article 85 states that the party whose rights and interests are damaged by a water pollution accident is entitled to ask the party discharging pollutants to eliminate the damage and compensate for their losses. The exemptions for the polluters are as follows: (1) If the damage is caused by force majeure, the party discharging
pollutants bears no liability for compensation, unless it is otherwise prescribed by law. (2) If the damage is caused by the victim on purpose, the party discharging pollutants bears no liability for compensation. If the damage is caused by the gross negligence of the victim, the liability for compensation of the party discharging pollutants may be mitigated. (3) If the damage is caused by a third party, the party discharging pollutants has the right to, after making compensation according to law, recover the compensation from the third party.

Article 86 of LPCWP prescribes that for a dispute over liability for damage or amount of compensation in a water pollution accident, the administrative department of environmental protection, the maritime governing authority or the administrative department of fishery may, according to the division of functions and duties among them and in light of the request of the parties concerned, settle it through mediation. If no agreement can be reached upon mediation, the parties concerned may file a lawsuit with the people’s court. The parties concerned may also file a lawsuit with the people’s court directly without going through the mediation procedure. In other words, the article suggests that adverse parties can submit issues regarding compensation to the competent environmental protection department for settlement. Parties can also bring their civil dispute directly to a people’s court.

For the purpose of providing protection for victims, article 87 further provides that for an action of damage due to a water pollution accident, the party discharging pollutants shall assume the burden of proof for legally prescribed exemptions and the nonexistence of relation of cause and effect between its act and the harmful consequences thereof. Based on the provision, burdens of proof in environmental pollution civil cases are shifted mainly on polluters.

To promote legal protection for water pollution victims, article 88 provides that if the number of parties whose legitimate rights and interests are damaged in a water pollution accident is relatively huge, these parties may select a representative to file a joint action. Furthermore, the administrative department of environmental protection and the related social groups may legally support the parties whose legitimate rights and interests are damaged in a water pollution accident to file a lawsuit with the people’s court. Legal aid for water pollution victims are also mentioned in the article, as the state encourages law firms and lawyers to provide legal assistance for victims of lawsuits regarding damage from water pollution accidents.

Since water pollution compensation cases will necessarily require evidence through monitoring data, the LPCWP affirms that for any dispute over liability for damage or amount of compensation in water pollution, the parties concerned may entrust the environmental monitoring institution to provide the related monitoring data, and the institution shall accept such entrustment and truthfully provide the required monitoring data.

Moreover, criminal liability is also referred to Criminal Code in article 90 of LPCWP where an intentional or negligent violation of the law creates a major water pollution accident which seriously threatens public health or private property. Specifically, suspects may be investigated by application of Article 115 or 187 of the Criminal Law. Article 115 of Criminal Law applies to major violations concerning the handling of hazardous articles, such as combustibles, explosives, poisons, corrosives, and radioactive materials, and establishes a maximum sentence for violations of seven years. Article 187 of Criminal Law establishes a maximum five year term for state personnel whose neglect cause major losses of property or to the interests of the people.
However, with regard to trans-boundary water pollution disputes, there are no additional provisions for judicial resolution or rights of provinces, autonomous regions or independently administered municipalities to seek legal redress for trans-boundary water pollution, or any other requirements that upstream jurisdictions incorporate the standards of downstream neighbours.

(4) Water Law of P. R. of China

Water Law of the P. R. of China, which was first enacted in 1988 and then amended in 2002, focuses on water issues from the perspective of natural resources.

The 2002 China Water Law recognized the importance of sustainable utilization of water resources by mandating that one of its purposes be "realizing the sustainable utilization of water resources." Importantly, the 2002 Water Law recognizes that in the overall scheme of water resource development and utilization, the demands of domestic, urban and rural inhabitants be satisfied first, before the demands for agricultural, industrial, and environmental water uses, as well as navigational requirements, are considered and satisfied.

2002 China Water Law consists of eight chapters containing 82 articles. Three chapters, not included in the 1988 China Water Law, address the planning of water resources, the allocation and conservation of water resources, settlement of water disputes, and supervision and inspection in the enforcement of the law.

Significantly, a new section on water resource planning was added in 2002. It incorporates principles of river basin management and also focuses on the need for a more unified administrative approach and more centralized watershed management. Moreover, the law delegates the MWR as the national body responsible for the administration and supervision of water resources throughout the country, including trans-boundary water resource issues. However, although trans-boundary water pollution is implied in numerous areas under the Water Law, the law focuses more on water allocation, water use, and flood prevention.

Water Law does not directly mention trans-boundary pollution issues in river basin management while it mentions that the LPCWP should be followed on matters concerning water pollution. At most, the law contains vague requirements of review and consideration of trans-boundary watershed plans, but without any specific provisions on pollution abatement or the rights of downstream jurisdictions. For example, Article 32 provides that plans for the division of "functions" in trans-boundary water must be developed by the relevant MWR bureaus and other governmental bodies and reviewed by the provincial governments. Likewise, the law provides that water resource use that involves trans-boundary water sources must conform to the water allocation plan for the entire watershed. However, the water allocation plan does not include any strong provisions mandating the incorporation of trans-boundary pollution prevention plans or standards. To the extent that trans-boundary interests are explicitly recognized, it is outside of the context of pollution.

The 2002 Amendment of Water Law specifically created a drinking water protection zone system. According to the drinking water protection zone system, governments at the provincial level shall delineate drinking water protection zones. Once established, these zones adopt measures to prevent water resource pollution and depletion in order to ensure safe drinking water.
for urban and rural residents. In addition, sewage outlets are not permitted in drinking water protection zones.

The 1988 Water Law provides for the resolution of two kinds of water disputes: those between regions and those between individuals or local entities. For water disputes between regions, the Law prescribes consultation in the spirit of mutual understanding, mediation, friendship and cooperation. If this method of consultation fails to settle the inter-regional dispute, the parties may appeal to the government at the higher level to assist in finding a solution to the dispute. For water disputes between entities or individuals, the Law allows settlement by way of negotiation and mediation. If one of the parties concerned is unwilling to settle the dispute through this process, or consultation and mediation fails to provide an acceptable resolution, either party can appeal to the government above the county level or its authorized department for guidance, or they can appeal directly to a court. The Water Law 2002 Amendment provides considerably detailed prescriptions on water dispute settlement. The Amendment provides that trans-boundary water disputes should be resolved through negotiation amongst the jurisdictions, failing which the people’s government at the next level should determine the binding adjudication. As these disputes are addressed in the administrative process, and given the closed nature of the Chinese government, there is little information available on disputes that have utilized this mechanism. Moreover, as the focus of the Amendment is primarily on allocation and flood prevention, it is doubtful that this will develop into a successful vehicle for addressing trans-boundary pollution problems.

(5) Other Legislation

Chinese legislation is regarded as framework instruments because the legislation both contains broad delegations of law granting authority to central and provincial ministries, and contemplates further law-making through administrative regulations. Alike most of Chinese environmental law, the water-related laws are broad and aspirational in nature. These laws always require the implementation of further regulations to set up targets, details, deadlines and conditions. The State Council, the highest executive body in China, has issued water regulations for the purposes of water regulation and administration. Chinese administrative agencies such as SEPA are also usually delegated specific environmental laws to administer, develop detailed regulatory measures and schemes to implement relevant environmental laws. Some regulations regarding trans-boundary water pollution include:

- Interim Regulation on the Management of Water Pollutant Emission Permits. The regulation, issued by SEPA on March 20, 1988, strengthens oversight and management of water pollution;
- Regulation on Pollution Control in Drinking Water Source Protection Areas Aims. The regulation, jointly issued by SEPA, Ministry of Health, Ministry of Construction, Ministry of Water Resources, Ministry of Geology and Mineral Resources on July 10, 1989, prioritizes the protection of drinking water sources;
- Interim Regulation on the Prevention and Control of Water Pollution within the Huai River Basin. The regulation, issued by the State Council on August 8, 1995, specifically enhances water pollution control in the Huai River with the goal of improving water quality;
Regulation on Wastes from Vessels and Solid Waste Pollution in Yangtze River. The regulation, issued by Ministry of Communication, Ministry of Construction and SEPA on December 24, 1997, aims to prevent solid and vessel waste from being dumped into the Yangtze River;

Provisions for the Implementation of the Law on Prevention and Control of Water Pollution. The provisions, issued by the State Council on March 20, 2000, facilitates the implementation of the Law on Prevention and Control of Water Pollution; and

Regulation on the Management of Key Pollutants emitted in the Huai River and Tai Lake Basins. The regulation, issued by SEPA on July 2, 2001, aims to control the key pollutants emitted in the Huai River and Tai Lake Basins.

At the provincial level, hundreds of water-related legislation has been developed. For example, Jiangsu and Zhejiang provinces have enacted tens of regulations aimed to alleviate the worsening water quality in Tai Lake and launched a series of clean ups since 1996. After Wuxi suspended its water supply due to the bloom of algae in 2007, legal changes were hastened and the Standing Committee of the Jiangsu Provincial People’s Congress revised the 1996 Regulation of Preventing Water Pollution in Lake Tai in Jiangsu Province. The revised regulation adopted some more aggressive measures to deal with pollution problems in its jurisdiction, including establishing the Regional Approval Restriction system so that environmental impact assessment approval would be suspended for regions that exceed the total pollutant cap; strengthening the water quality monitoring system through total discharge caps, national and local monitoring stations, increasing penalties for non-compliance, and inter-regional law enforcement; establishing the Drinking Water Protection Program, which includes a public notification mechanism and daily patrolling of drinking water sources; and clarifying the liability of water pollution.

Despite numerous water-related laws and regulations in China, few provisions can directly respond to the challenge of trans-boundary pollution issues. Furthermore, as environmental provisions are generally written in general language, this limits their effectiveness, and decreases the predictability regarding the application of these laws. For example, the Law on Prevention and Control Water Pollution provides that “enterprises and other undertakings which cause serious water pollution must eliminate pollution within a stipulated time”. However, expressions such as “serious water pollution” and “other undertakings” are not clearly defined.

The current problem with the water legislation is also evident in the confusing manner that the major laws addressing water pollution separately address trans-boundary issues, watershed management and the delegation of authority. There are many areas of activity that are not governed by national standards. This gives local authorities unbridled discretion, and often translates into continued environmental degradation going unchecked because local governments put economic goals ahead of environmental priorities. This is particularly evident in the area of trans-boundary water pollution regulation because of a lack of any unified or specific regulatory framework.

Consequently, one of the first major reforms needed to improve the regime for trans-boundary water pollution is the development of a distinct body of legislation addressing trans-boundary water pollution. Although a separate law on trans-boundary water pollution is not necessarily the answer, a revision of the relevant legislation that would incorporate a strong framework for
controlling trans-boundary pollution is necessary. The 2008 Amendment of LPCWP makes progress in water pollution prevention and control in the trans-boundary context. However, it has not yet met the legislative needs fully, considering the severity of the problem.

8. Regulatory Enhancement and Accountability Construction: An Effective Reaction to Trans-Boundary Water Pollution

In the long run, there is no doubt that judicial bodies should play a much more important role in dealing with trans-boundary water pollution disputes in China. However, as the process largely depends on judicial reforms and even cultural changes in China, this would be a long process. With regard to the urgent trans-boundary water pollution issues, administrative reactions and governmental responses can take measures more quickly and effectively on dealing with trans-boundary water pollution issues. In this report, focus is placed on strengthening water pollution supervision, coordinating water-related administrative agencies, empowering river basin regimes, and enhancing governments’ accountabilities.

(1) Strengthening Water Pollution Supervision

SEPA is the main government agency responsible for environmental protection nationally. SEPA has corresponding bureaus at the provincial, prefecture and county levels. In recent years, SEPA’s status has risen considerably. In 1998, SEPA attained full ministerial rank during the government administrative reform. In 2008, SEPA was promoted as the Ministry of Environment. However, given the youth of environmental practice and legislation in China, SEPA, with some 300 employees at the national level, suffers from a lack of resources. However, SEPA mainly acts as the national environmental policymaker and can hardly exercise environmental enforcement powers due to the decentralized structure of environmental powers in China. As a result, environmental protection agencies at the provincial or local levels are responsible for enforcement of environmental laws and regulations in their own jurisdictions.

The separation of national legislative and policy planning from enforcement powers has severely handicapped SEPA’s ability to act effectively and contributes significantly to China’s major enforcement and compliance problems. The unbridled trans-boundary water pollution, to a great degree, can also be attributed to the failure of local authorities’ enforcement, as local governments are often reluctant to crack down on polluters since they are important for local economic development and job opportunities.

One of the answers to this dilemma is to strengthen SEPA’s enforcement powers. As a national governmental body, SEPA is less prone to local economic interests and influence by local governments. Logically, such a transformation would require strengthening the central government’s enforcement role in the trans-boundary water pollution context. In response to the crucial issue of trans-boundary water pollution accidents, some significant institutional changes have recently taken place. In order to coordinate the resolution of trans-boundary environmental disputes, SEPA established the Environmental Emergency and Incident Investigation Centre in 2002. Then, the central government established five regional agencies, which cover all of the areas in China. The regional offices are directly funded, recruited, and managed by SEPA from its Beijing base. However, the main function of these institutions is still confined to deal with
emergencies and incidents of environmental pollution rather than to deal with trans-boundary water pollution. It is also evident that it is difficult for SEPA alone to deal with trans-boundary water pollution issues, owing to its youth and scant resources.

(2) Coordination of Water-Related Governmental Agencies

China’s environmental legislation is centred on the prevention of pollution rather than on overall protection of natural resources. Meanwhile, the administrative power of the nation’s environmental authorities is limited to prevention and control of pollution. As a result, the protection of natural resources is managed and controlled by other administrative departments, The Ministry of Water Resources (MWR) is responsible for both the protection of China’s rivers as well the exploitation of its water resources, such as hydropower projects. MWR is specifically charged with water resource management and conservation, developing water resource legislation, implementing the water permit system and fee system, and other enforcement of water resource regulation.

The LPCWP and Water Law, the two main laws related to trans-boundary water pollution fail to coordinate with each other and provide limited reference to integrated approach regarding river basin planning and management. For example, neither the LPCWP nor the Water Law creates a requirement to share data across agencies. Instead, the 2008 Amendment of LPCWP only stipulates that monitoring data of environmental protection agencies is authoritative data for the purpose of water quality protection. In fact, MWR and SEPA still undertake their own monitoring. Although local and provincial EPBs and Water Resource Bureaus (WRBs) are accountable to the same governments within their jurisdiction, there is also very little coordination between them.

In relation to trans-boundary river basin management in China, SEPA alone can never guarantee the full enforcement of environmental laws and regulations. There is also an overabundance of overlapping, redundant policies, and a dearth of effective, unified management. The overlapping duties of the government bodies often result in bureaucratic turf wars and a policymaking quagmire, which results in fragmented and uncoordinated legal enforcement. Therefore, the governmental ministries need more coordination with environmental enforcement, river basin planning, data gathering and information sharing. An effective coordination and cooperation among SEPA, MWR, River Commissions and other relevant entities would make significant strides towards controlling trans-boundary water pollution.

The central government should play a pivot role in taking the lead in orchestrating integrated planning between SEPA, MWR, River Commissions, and the various provincial and local government authorities in order to enhance trans-boundary water pollution management. A joint committee with a secretariat could be created with responsibility for coordinating the relevant governmental bodies to deal with trans-boundary water pollution issues and emergencies. An expert advisory committee could be established to help guide trans-boundary water management, and joint water monitoring, surveying and research could be conducted. Nonetheless, due to the complexity of engaging several separate bureaucracies to cooperate, translating proposals into real actions, particularly at local levels, remains challenging.
(3) Empowering River Basin Regimes

One of the principal reasons for trans-boundary water pollution in China is that each province is responsible for its own water quality and quantity management. Lack of strategies to protect the water on a river basin scale increases the risk of pollution-induced damage. Under some circumstances, unchecked upstream pollution is likely to make efforts to control pollution downstream in vain. Without an effective river-basin regime to supervise trans-boundary pollution and without means for provinces to effectively complain of violations, pollution is likely to continue to flow unabated.

There have already been river basin commissions established for the seven biggest river basins in China, and some trans-boundary lakes, such as Taihu Lake, have established trans-boundary water resources management bureaus. Nonetheless, the river basin regimes are weak and relatively ineffective because they lack the requisite enforcement powers. The powers executed by these river basin commissions are basically advisory in nature. Specifically, the river basin commissions generally fail to integrate pollution control planning at the basin level. Implementation of pollution control is also an issue. In the Huai River, the Huai River Commission, which is under the direct of Ministry of Water Resources, mainly deals with planning water volume in the river basin. However, the Commission lacks jurisdiction to control water resources management in the provinces in the river basin areas. It also does not possess pollution planning or management powers apart from the coordination with SEPA in developing the river basin pollution control plans. The Commission’s weak enforcement powers severely restrict its function in trans-boundary water pollution prevention and control.

The 2002 Water Law, to some degree, attaches importance to a unified and integrated approach to water resource management. For instance, the law attempts to strengthen centralized basin management by requiring the central government to establish a system of basin administration in coordination with regional administration. However, these expressions concerning river basin regimes are generally abstract and aspirational. Similarly, during the research for the drafting of river basin laws such as the Yellow River Law and Yangtze River Law, some scholars and governmental officials proposed to establish more powerful and more democratic river basin regimes on the basis of river basin government. However, the step forward is not easy at all owing to its conflicts with the existing regimes. It is not strange that the 2008 Amendment of LPCWP does not have any provision concerning strengthening river basin management. Although there were some endeavours during the drafting process to achieve these goals, the successful cases are rare. In some sense, Talimu river basin legislation within the Xijiang Uygur Autonomous Region is an exception. The local act has, to some degree, made progress in terms of the establishment of a powerful and democratic river basin management regime, which is obviously conducive to trans-boundary water pollution prevention and control.

The severe water pollution and other critical water issues require transformation from the current fragmented river basin pollution prevention and control into a unified and integrated prevention and control on a river basin scale. A river basin authority that would be able to execute true trans-boundary supervision and enforcement on a river basin scale should be developed.
(4) Forging Governments’ Accountability for Trans-Boundary Water Pollution Management

China takes a split, multi-tiered administrative structure to regulate and enforce the water pollution laws. In terms of trans-boundary water pollution, China’s delegation of environmental enforcement power to the provincial and local levels is relevant.

The Environmental Protection Law provides that the government at different levels should be responsible for environmental quality within their jurisdiction, and should take measures to improve environmental quality. Similarly, in the 2008 Amendment of LPCWP, Article 4 notes local governments’ responsibilities for water quality protection within their jurisdictions. It states “The people’s governments at or above the county level shall bring the protection of water environment into the national economic and social development planning. The local people’s governments at or above the county level shall take countermeasures and actions to prevent water pollution, and be responsible for the quality of water environment of their respective jurisdictions.”

Nonetheless, local environmental protection agencies, delegated with environmental enforcement power, have difficulty in fulfilling their enforcement duties in the trans-boundary context because of the existence of a variety of administrative and practical dilemmas related to China’s endemic protectionism. Although environmental legislation gives local governments responsibility for the quality of environment within their jurisdiction, this is more of a general and vague policy statement without implementation or deterrence mechanisms. The provincial and local governments are likely to thwart the central government’s environmental agenda through their local control of enforcement organizations. Local officials tend to rely upon lowering environmental standards to pursue GDP growth, and sacrificing environmental quality for short-term economic benefits and advancement opportunities.

The local environmental watchdogs, provincial and local environmental protection bureaus (EPBs) that are charged with enforcing environmental laws and regulations, are actually organized and funded by the local governments. Under these circumstances, local EPBs in China have lacked the power to be strong enforcers of pollution laws simply due to interference by local governments. Furthermore, environmental goal-setting and shutdown orders issued by EPBs must be approved by local governments according to the EPL.

In this situation, polluters often escape from being accountable for the harm they cause to human health and the environment since local governments often avoid imposing strict enforcement on businesses that build the local tax base and employ a large number of people. In the Zhaiwan case, the small township and village businesses promoted by the local governments upstream in Henan Province are significant polluters. However, the county governments in Henan Province occupy the lowest level of government authority and local EPBs play an extremely important role in running the day-to-day environmental enforcement against local polluters.

The investigation indicates that local environmental enforcement officials at the county level in Nanyang Municipality were often reluctant to perform their enforcement powers because of the pressure from the local governments that paid attention to local economic growth or business
operation rather than the water pollution downstream. Even though local environmental officials succeeded in closing down a factory, it would often reopen in another locale or operate at night. Until local regulators eliminate their conflicts of interest and turn their focus from economic growth to the sufferings of water pollution victims, environmental enforcement will be ineffective.

The existence of sufficient rules and regulations means little if they cannot be enforced due to power politics, vested interests, lack of funds, or the absence of the public from the decision-making process. The lack of enforcement of water pollution controls at the provincial and local levels is one of the most important reasons for China’s rampant trans-boundary water pollution. Therefore, to a large degree, the difficulty in managing the effects of trans-boundary water pollution is actually an issue as to how to pressure local governments to regulate local business and industries.

Local governments and their officials should be held accountable for environmental enforcement in their jurisdiction. In particular, efforts to make environmental protection a greater part of local officials’ performance reviews and promotion prospects must be strengthened and enforced. In the 2008 Amendment of LPCWP, a provision was added concerning the examination and evaluation of local governments’ water environmental protection performance. Specifically, Article 5 of LPCWP provides: “The state practices the objective responsibility system and the evaluation system for the protection of water environment, and takes the accomplishment of the protection objectives of water environment as content for evaluating and assessing the local people’s governments and persons in charge of them”. Article 26 further provides: “The institutions of protection of water resources of important rivers and lakes determined by the state shall be in charge of monitoring the water environment quality of provincial boundary waters where they are located, report the monitoring results to the administrative department of environmental protection and the competent department of water administration under the State Council; and report the monitoring results to the leading institution of protection of water resources of drainage areas established upon the approval of the State Council, if any”.

A provision about total pollutant discharge control and suspended authorization of certain polluted areas also incorporated into the Amendment. Article 18 of LPCWP provides:

“The people’s government of each province, autonomous region, or municipality directly under the Central Government shall, in accordance with the provisions of the State Council, reduce and control the total discharge of important water pollutants in its administrative region, and have the people’s government of each city or county bear corresponding responsibility and task for the reduction and control of the total discharge of important water pollutants. The people’s government of each city or county shall, in accordance with the requirements of its task on the reduction and control of the total discharge of important water pollutants, decompose the indicators of its task and assign them to all entities discharging pollutants. The specific measures and implementation steps shall be formulated by the State Council. For areas where the total discharge of important water pollutants is over the prescribed level, the administrative department of environmental protection of the related people’s government shall suspend the examination and approval of the environmental impact assessment documents of construction projects which increase the total discharge of important water pollutants”.
In addition, the Amendment also establishes ecological compensation mechanisms for the purpose of drinking water protection. Article 7 provides: “The state shall, in the mode of financial transfer payment or other, establish a compensation mechanism for the ecological protection of the water environment in drinking water source reserve areas and upper reaches of rivers, lakes and reservoirs.”

Although there are some legislative changes, it is still unpredictable as to what degrees the Amendment can break through the obstacles created by endemic protectionism and achieve the purpose of trans-boundary water protection. Without a strong central legal apparatus, the highly decentralized system of environmental protection has continued China’s prerevolutionary reliance on the environmental proclivities of individual local officials.

Apart from the legislative constraints, Chinese leaders in the central government have also sought other disciplines to encourage governmental officials to comply with environmental law. Given that endemic protectionism is a main obstacle in trans-boundary water pollution management, the State Council, China’s cabinet, initiated a policy to incorporate an environmental index into the indices which are used to exam and evaluate the performance of local government officials. In the past, the assessment of officials focused on their performance in areas such as economic growth, family planning and workplace safety. The evaluation system for local governmental officials is being re-structured by introducing the concept of green GDP, which would calculate the environmental and ecological cost in tandem with the economic growth. SEPA and the Organizational Department of the Central Committee of the Communist Party of China, which is in charge of promoting Party officials, are studying how to incorporate environmental parameters into evaluating an official’s performance, such as overall environmental quality based on public survey, quality of air and drinking water and forest coverage. However, the attempts to compel local governments to enforce environmental laws by linking “green GDP”, economic growth and improvements in environmental quality to individual promotions is difficult due to strong objections of local governments.

Some local practices should be mentioned. The Regulation on Prevention and Control of Water Pollution in Yangtze River in Jiangsu Province, promulgated on December 22nd, 2004, provides the concept of regional water quality accountability between regions upstream and downstream and further establishes governments’ liabilities to compensate for trans-boundary water pollution. In 2008, the Jiangsu provincial government further enacted the Trial Decree on Measures of Regional Compensations of Environmental Resources and Schedule on Regional Compensations of Environmental Resources in Tai Lake Basin in Jiangsu Province, which contains specific standards concerning regional compensation.

According to the decree, the monetary compensation should be used for the prevention and control of water pollution and ecological recovery of water environment. The Regulation on Trans-Boundary Water Quality Protection Based on Water Sections at Regional Boundaries in Guangdong Province, promulgated on 1st June 2006, provides concrete and practicable measures to combat trans-boundary water pollution, including setting water sections, water quality monitoring, EIA, settings of management powers, disputes settlement and legal liabilities. Furthermore, an increasing number of basin-based water pollution coordination mechanisms have been established nationwide and more provinces and regions are becoming involved. For example, the Memo of Coordination and Cooperation of Trans-Provincial Water Pollution
Conflicts in Southwest China and Adjacent Provinces and Measure on Administrative Settlement of Trans-boundary Pollution Conflicts in Zhu River Basin Delta Areas were recently signed by the relevant provinces.

In order to provide legal relief for trans-boundary water pollution victims, some specific administrative actions and measures should be taken into consideration. This research proposes to develop the governments’ accountabilities for legal relief of trans-boundary water pollution victims by creating an institution charged with addressing compensation for trans-boundary water pollution victims through legislation. This institution purports to provide timely and effective relief for trans-boundary water pollution victims who have suffered health damages by imposing compensation liability on relevant governments responsible for trans-boundary water pollution management. Differing from litigation, where relief for victims is on a specific case-by-case basis, the institution adopts a collectivist methodology, and is based on governments’ administrative power and their accountabilities. The governments can investigate and designate specific polluted basin areas where the local water pollution victims suffer certain kinds of illnesses resulted from drinking polluted water. Then based on the governments’ public finance and pollution discharge fees collected by EPBs, the governments give some allowance and compensation to qualified victims to cover their costs of medical treatment. The institution can help provide the victims with legal relief in an effective and efficient way.

9. Water Governance: A Fundamental Resolution to Legal Relief for Trans-Boundary Water Pollution Victims

Trans-boundary water governance is a human development issue. Trans-boundary water pollution constitutes systematical challenges to the existing Chinese systems. To deal with the trans-boundary pollution problem, China faces a litany of legal, political and economic challenges. However, trans-boundary water pollution in China is not only unique to that particular subset of Chinese environmental law, but also germane to many of the hurdles China must overcome today.

From a theoretical point of view, the nature of water sources as a public good requires the governments to seek active environmental enforcement through policy and law, as no other entity can or will control water pollution effectively. In recent years, the Chinese central government has taken priority to take measures to ensure the safety of drinking water, such as in the 10th and 11th Five-Year Plans. In addition to amending the Law on Prevention and Control of Water Pollution in 2008, the central government revised the national standards on drinking water quality, which entered into force on July 1, 2007. In comparison with the standards for drinking water issued in 1985, the new standards raised the number of indicators measuring the safety of drinking water from 35 to 106. In association with the policy change, some campaigns were launched to improve the water pollution situation. For instance, SEPA launched a special law enforcement inspection in drinking water source protected areas in 2006, which checked over 7,600 such sources across the country and more than 1,400 pollution sources threatening the safety of drinking water were banned or removed.
In spite of the attempts to control water pollution, the effectiveness of these top-down measures is not enough. The failure of these measures to address trans-boundary water pollution reminds us that new measures should be considered and further discussed.

The nature of water as a public good makes it clear that governments should guarantee that water is available for the public in terms of its volume and quality. However, as facts have shown, it is impossible to achieve the goal by the governments alone. There is always governmental failure due to some internal constraints of the governments and inadequate resources. While the Chinese government has tried to address water pollution through various top-down efforts, including a series of government-launched clean-up campaigns, the result is far from optimistic. The facts indicate that if the Chinese governments want to combat the intimidating environmental challenges successfully, it must not only provide for stronger environmental regulations and enforcements, but also empower environmental grassroots’ organizations to become involved in the efforts.

The Huai River is a convincing example in China. Despite a decade-long central government campaign that began in 1993 to clean up the river, the tragic story of trans-boundary water pollution is still continuing and millions of citizens in the basin suffer from significantly higher rates of cancer as well as other health problems. The failure of the campaign and many of the other ambitious pollution measures stem largely from the dominant thoughts of governmental control and regulation. By contrast, the history of environmental movements in western societies indicates that environmental protection requires a vibrant civil society. The important role of civil society in the effective management of water resources has been confirmed around the world. The fact confirms that environmental enforcement demands not only better regulations but also the true empowerment of NGOs and citizens to become even more effective watchdogs.

The goal to control trans-boundary water pollution calls for the active involvement of civil society. Fortunately, the China’s government has realized that the establishment of these relatively independent efforts can help close the gap between its desire to improve the environment and its capacity and will to do so. Generally speaking, although China’s civil society is still in the process of development, the growth of environmental NGOs is currently the largest sector of China’s civil society.

Good water governance should include: (1) broad participation through the entire decision-making process; (2) transparent flow of information; (3) equitable opportunities to increase well-being; (4) accountability from the governments, private sector and civil society; (5) coherency of water resource measures; (6) responsiveness to changing water conditions and societal factors; (7) integrative approach to water basin management; and (8) ethical principles that resonate with varying societies based upon inclusive dialogues. Based on China’s situation, water governance should especially attach importance to the following five elements: accountability of governments (discussed before in the report); access to information; public participation; access to justice; and citizen enforcement.

(1) Access to Information

Information and knowledge is indispensable for reasonable and equitable water use and for building the basis for collaborative planning and management in the context of river basins. The
way information is generated, analysed, controlled and disseminated sets up the context in which perspectives are formed and solutions are generated. In countries such as Australia and the USA, pollutant registries mandate it to publicly disclose certain pollutant releases and transfers. Similarly, such spotlighting approaches rely upon public scrutiny rather than sanctions to encourage green corporate decisions in the EU. Access to water and water pollution data is no doubt fundamental for water governance in the trans-boundary water pollution context. In line with legal and regulatory requirements, governmental agencies should give civil society reasonable access to information on the activities of the agency and regulated activities and specifically establish procedures for citizens to request and receive specific information via all available media within a reasonable timeframe.

Although the government has made great progress to publish more environmental reports on water and other environmental information, access to specific environmental statistics is still underdeveloped in China. In terms of trans-boundary water pollution, governments should provide the public with authentic and authoritative information on water pollution. The Chinese government should allow increased transparency regarding the health impact of pollution, given that such impact on human health has become more widespread in China. Regardless of which governmental department or at what level of government collects the water pollution information, it should be available to the public, subject to the confidentiality provisions. The case of Zhaiwan Village reveals that the villagers lack the necessary access to information on drinking water pollution and failure to access such information has prevented them from taking legal actions against polluters.

China’s environmental NGOs have successfully made more environmental information accessible to the public. For example, the Institute of Public and Environmental Affairs, a Beijing-based environmental organization, launched China’s first online public database of water pollution. This database contains a digital water pollution map which enables internet users to survey water quality and monitor pollution discharge. The creation of such information-sharing platforms has begun to yield tangible results in the form of media coverage and government action.

Moreover, China’s media plays an increasingly important role in obtaining public access to relevant environmental information. Chinese newspapers, radio and television now prioritise environmental issues. In particular, television has become an integral part of environmental protection to educate the public and spur citizens to take individual action. In the case of the Huai River, based on the health surveys of over 100 villages in the Huai River basin conducted by the Huai River Protectors, the Chinese news media, including the state-owned CCTV, have reported on the abnormally high cancer rates in the villages. Such news reports have forced local governments to invest in the drilling of deep wells to supply safe and clean water for the villagers. In the case of Zhaiwan village, the pollution in the Bai River attracted considerable media attention both in China and overseas. Zhaiwan village was the first village to draw the attention of the media to their plight, and the media attention led to government action. By contrast, the local governments did not react as immediately towards the other polluted villages that failed to appeal their plight to the media.

In China, access to water information would require a number of legal reforms, evolution of the legislation and transparency of administrative procedures. The basis for such a regime is the
recognition of the citizens’ fundamental right to environmental information. Recently, SEPA enacted China’s first national environmental performance information disclosure program that requires the government to rate the environmental performance of local companies, particularly by the quality of effluents released into the water system. This initiative will be facilitated by SEPA’s new Environmental Information Disclosure Regulation, which was released in 2007. Such steps towards corporate accountability will potentially increase pressure on high-polluting firms to improve environmental performance. In contrast to disclosure by corporations, the governmental disclosure is a tougher job and a more important change.

(2) Public Participation

Trans-boundary water governance involves distributing water equitably based upon need, custom and cyclical availability. Conflict resolution requires sustained interaction to achieve consensus. Civil society and community participation foster a greater understanding of the interaction of the complex social and environmental processes related to water management and water pollution control, which enables the rethinking of approaches to equitable and effective water use.

Water should remain in the public domain and decisions regarding water use should be the outcome of consensus-based actions that balance human and ecosystem integrity in a sustainable manner. Achieving good water governance requires balancing competing water utilization interests of various entities, particularly including socially disadvantaged indigenous or rural communities that have historically been relying on extracting drinking water from trans-boundary water bodies. The prioritization of water uses must be based on participatory mechanisms that enable water conservation and equitable access. Active involvement goes beyond simply making information available to the general public. Governmental agencies should provide clear mechanisms for public participation in decision-making, water pollution compliance and enforcement. Meanwhile, governmental agencies should facilitate public involvement in governmental decision-making regarding enforcement and compliance plans, policies and actions.

Governmental agencies should involve civil society in compliance monitoring and filing of complaints or lawsuits. China has, to some extent, opened the door to the involvement of non-governmental organizations in environmental protection. Chinese environmental NGOs, such as Friends of Nature, have successfully launched high-profile environmental awareness campaigns among the general public, while international activist groups like Greenpeace have been whistleblowing about grave environmental damages caused by multi-national companies in China.

The growing seriousness of water degradation and pollution has catalysed a number of Chinese NGOs and even individual citizens to pursue more aggressive activities. The Report of Chinese Environmental NGO Development, 2008 Environmental Blue Book released by the All-China Environmental Federation, provides a comprehensive survey and analysis of the state of environmental NGOs in China. As of October 2008, there were 3,539 environmental NGOs in the country, an increase of 771 from 2005. The survey counted in total 1,309 government-organized NGOs, 1,382 school-based groups, 508 grassroots organizations, and 90 international groups in the main land of China. Some 55 percent of NGOs now have their own offices, an increase of 15 percent from two years ago. Among the people leading these NGOs, 78% have a scientific or technical background. Despite the progress, public participation in the
environmental sphere remains insufficient in protecting many Chinese citizens from the harmful consequences of serious pollution.

In the Zhaiwan village case, the local community NGO - the Green Han River - came into being with the help of local EPB in Xiangfan, Hubei Province. Aimed to protect the water quality in the Bai River, Green Han River became the first environmental NGO in Hubei Province, which was registered and authorized by the Department of Civil Affairs. Green Han River acts as a liaison between local communities, governments and businesses in the trans-boundary water pollution issues while dedicating itself to environmental education and public involvement. Since 2001, Green Han River has organized “citizen walks of the local waterways” and launched a citizen monitoring program which provide water quality training to empower community members to identify and address water pollution. Partly owing to Green Han River’s efforts, a national investigation took place and resulted in the closure of some of the polluting enterprises in Henan Province. The Green Han River also contributed to the final solution of drilling a well as a new drinking water source.

A crucial element of China’s environmental law reform lies in deeper and greater public participation. In the past few years, Chinese legislators have attempted to increase public participation in environmental decision-making in order to strengthen legal enforcement of pollution control. As a result, the legal grounds for increased public participation in water protection can be found in both the China’s EPL and LPCWP.

For example, Article 6 of EPL states that “All units and individuals shall have the obligation to protect the environment and shall have the right to report on or file charges against units or individuals that cause pollution or damage to the environment.” Article 10 of 2008 amendment of LPCWP expresses in a similar tone. Both laws include provisions that allow pollution victims to bring lawsuits against the responsible parties.

Through legislation like the Law on Environmental Impact Assessment, Chinese legislators have attempted to increase public participation in environmental decision-making. For example, the Law on Environmental Impact Assessment entrusts relevant people and the public with the rights to have public hearings for environmental impact assessments. Some newly promulgated environmental information dissemination regulations and general government transparency laws also empower citizens by giving them greater access to pollution information. Although encouraging steps towards empowering the public, these laws do not clearly stipulate the conditions and procedures for public participation. Thus, many citizens do not know how to assert their rights even if they are aware they possess them. Consequently, the Chinese water laws have not yet provided substantive and procedural rules which are practical enough to achieve public participation.

Mobilizing the masses in a top-down manner has been an important tool for social change in China in the past few decades. However, bottom-up citizen participation is still underdeveloped in environmental protection in China. The functions and actions of environmental NGOs are still confined to some degree. Compared to their counterparts in western countries such as Australia and the United States, nongovernmental environmental organizations have finite impacts and capacities. Public participation is far from sufficient for the purpose of protecting Chinese citizens from the harm of water pollution.
With regard to the seriousness of trans-boundary water pollution, environmental groups should be encouraged to participate more in water pollution cases. They can be highly effective in mobilizing communities, increasing awareness, developing solutions, and providing legal advocacy and aid. The report 2008 Environmental Blue Book also highlights the challenges they continue to face. Some 29 percent of NGOs lack full-time staff, while 46 percent only have 1-5 full time staff. Growth in staff size has been most visible among international environmental NGOs. The male-to-female ratio, while improved, is still around 3-to-1. While 26 percent now have a fixed source of investment, it represents a small increase of 2.1 percent from 2005. The report notes that weak organizational ability, limited funds, insufficient cooperation and shortage of staff will continue to be the major barriers to NGO growth in the coming years.

(3) Access to Justice and Legal Aid for Trans-Boundary Water Pollution Victims

Based on China’s current environmental law, Chinese citizens have the legal right to bring environmental disputes, including some administrative environmental disputes with the government, to courts if their legal environmental rights and interests are injured by pollution. In spite of the legal rights, many cases indicate that judicial tribunals would be used as a last resort after all other administrative remedies are exhausted. The reasons that judicial tribunals are not a preferential channel to address their environmental disputes have to do with cultural traditions and some realistic obstacles in China. Once the administrative agencies fail to fulfil their duties, which happen frequently, it raises a crucial issue as to how water pollution victims can obtain legal relief. Apart from creating administrative mechanisms, China needs to strengthen citizens’ access to justice.

The thoughts reflected in the current water pollution legislation in China are administration-centred. Following the tone of previous legislation, administrative settlement of trans-boundary water pollution disputes is restated in the 2008 Amendment of LPCWP. Article 28 provides “Any dispute over water pollution which involves more than one administrative region shall be settled upon the negotiations of the related local people’s governments, or upon the coordination of their common higher people’s government.” Article 86 further states: “A dispute over liability to make compensation or the amount of compensation may, at the request of the parties, be mediated by the competent environmental protection department or by the navigation office of the competent communications department. If a party refuses to accept the mediation, he may bring suit before a people’s court. The party may also bring suit before the people’s court directly.”

As a matter of fact, administrative settlement works like a double-edged sword from the perspective of an environmental rule of law. On one side, the administrative measures are likely to provide victims with more timely and efficient relief than through time-consuming and expensive litigation. Administrative settlement can also mitigate social conflicts and address conflicts at a low social cost. However, on the other side, excessive reliance on administrative power and interference is likely to lead to its enlargement and abuse because the settlement are generally not based on law but administrative authorities. As a result, the rule of law could be undermined. Moreover, a consideration of efficiency generally prevails over a consideration of equity in the process. In this respect, excessive reliance on administrative powers to solve disputes is likely to impede the judicial query and pursuit of justice in the China’s context.
contrast, a judicial solution to trans-boundary water pollution cases can increase public awareness and help the public enhance the respect for the rule of law, which may in turn further deter polluters.

Based on the above analyses, the solution to trans-boundary water pollution in China should not only rely on building up an effective and flexible administrative system, but should also attach much importance to enhance access to justice for water pollution victims. Specifically, based on the recognition and enforcement of basic legal rights to drinking-water-related health of citizens, the Chinese governments should develop a more transparent, independent and fair judicial systems to deal with the cases.

As environmental consciousness increases, some Chinese people may approach the courts to advocate for their rights. In particular, one channel that critically needs to be developed for trans-boundary water pollution victims’ relief is litigation. Apart from legal relief for trans-boundary water pollution victims, private litigation could become a stronger channel for dealing with trans-boundary water pollution problems in China. Given that momentum for environmental protection come from the citizens, the public should be granted the rights to clean water and access to the courts, and can also provide internal, persistent and fundamental impetus for trans-boundary water protection.

According to the latest legislative development, technical legal problems for trans-boundary water pollution cases have been solved to a great extent. For the purpose of protecting pollution victims, both the EPL and LPCWP confer individuals the right to sue water polluters for compensation and retribution. In particular, the laws provide some litigious provisions in favour of pollution victims in civil cases. Litigious barriers that prevent pollution victims from seeking redress by means of judicial litigation have also been solved by China’s environmental legislation to a certain degree.

For example, in order to remove the difficulty for pollution victims to prove the causal link between polluting activities of polluters and the damages incurred, the legislation shifts the burden of proof to the polluters in civil cases of environmental pollution by these laws. In other words, the plaintiffs only need to demonstrate a superficial and factual causal link between the harm incurred and environmental contamination. The main burden of proof is then borne by polluters. In the context of trans-boundary water pollution, it is difficult to identify numerous polluters and pollution impact on human health is always latent, delayed, long-term and complicated. However, by shifting the burden of proof to the polluters, it is easier for pollution victims to file a civil case in court. In addition, non-fault civil liabilities of polluters for injuries and losses caused by their pollution activities in environmental pollution cases are also established. These provisions can exempt pollution victims from a heavy burden of proof.

In comparison with the EPL, the 2008 amendment of LPCWP goes further in terms of the protection of water pollution victims by clarifying evidence rules and providing more supportive civil procedures. Specifically, the Amendment shifts the burden of proof from the polluted plaintiffs to the defendants, i.e., polluters. In other words, the basic principle of “who claims, who proves” in civil cases is not applicable to environmental pollution cases for the purpose of protecting the pollution victims, as they are disadvantaged in the litigation. As water pollution always involves many victims, the Amendment supports class actions brought by a number of
water pollution victims. According to the amendment, if there are a large number of victims, they can file class actions and bring a lawsuit brought by one or more plaintiffs on behalf of a large group bound by a common wrong.

This is actually the first time that Chinese laws have made such explicit stipulations on when and how to use class action and this provision is expected to encourage water pollution victims to file more class actions in court. Furthermore, the Amendment contains articles to encourage governments, social organizations, legal institutions and lawyers to provide legal aid for water pollution victims. The amendment also prescribes that water pollution victims can request monitoring data from relevant environmental protection agencies for the purpose of their litigation case.

In spite of the legislative reaction, trans-boundary water pollution victims still have trouble filing suits against polluters and responsible governmental bodies. As a matter of fact, only a small portion of disputes of trans-boundary water pollution have so far been heard by the courts and few victims complaints have culminated in any action taken. In practice, the overwhelming majority of environmental pollution cases in China do not proceed to the courts. The phenomenon requires us to question and analyse why in-depth.

There are many reasons that prevent the Chinese people from choosing litigation to solve their water pollution disputes.

As mentioned before, the first reason is that there is no tradition of the rule-in-law and culture of recourse to litigation in China. Victims in rural areas like the Zhaiwan villagers generally lack legal awareness to protect their legal rights through litigation. They are prone to resort to their local governments to seek redress. Secondly, endemic protectionism exacerbates the problems of judicial independence, efficiency and justice, which directly influence the trust of trans-boundary water pollution victims in the courts and in litigation. Thirdly, judges and lawyers generally lack expertise in environmental pollution cases and some of them may even take a negative attitude to environmental pollution victims. Fourthly, litigation is very time-consuming and expensive while effective and complete enforcement of court’s judgments cannot always be guaranteed. Fifthly, the high cost of litigation, weak capacity and limited resources directly prevent water pollution victims from bringing a civil suit against the polluters in the courts. Sixthly, judges who are responsible for class action cases, which are common for trans-boundary water pollution cases, are always wary of making their verdicts since they are afraid of uncontrolled social unrest.

Despite the litanies of obstacles to access to justice, the judicial body should no doubt play a more important role in China. What is interesting is the recent reform of judicial bodies in China. In response to the huge challenges posed by environmental problems, two special environmental protection courts, which are similar to Court of Land and Environment in Australia, have been established in Guizhou Province and Jiangsu Province respectively over the past three years.

The social response to the new judicial institution has been quite positive. EPB officials, academia, environmental lawyers and the general public welcome the innovative judicial institution and hope that the new judicial organ can help curb the worsening pollution in China. Wuxi environmental protection court in Jiangsu Province has also been established to strengthen
trans-boundary water protection in Tai Lake. Among the problems people hope this new special court will address are the insufficient specialization and capacity of judges in solving environmental disputes, the challenges plaintiffs face in bringing suits and collecting evidence, and potential barriers to enforcing judgments against defendants who play a critical role in the development of the local economy.

According to the reform plan, all three types of environmental disputes will be sent to the environmental courts for resolution instead of following the normal practice of separating cases for the civil, administrative or criminal courts based on the nature of the rights involved. Moreover, the environmental protection courts are given the authority to enforce the judgments they have made, a function that has always been the exclusive power of the enforcement divisions of the courts, with the exception of some criminal punishment. However, the idea that the courts break down the borders of civil, criminal, and administrative divisions inside the courts is very controversial and the result remains uncertain.

There are also other suggestions regarding judicial reform to meet the needs to deal with trans-boundary water pollution. For example, a proposal by some representatives of the National People’ Congress urges a shift in the jurisdiction of trans-boundary water pollution cases from local courts to marine courts, which are established to deal with judicial issues in coastal areas and inland rivers and go beyond a certain administrative jurisdiction in China. It is hoped that this will break through the obstacles of endemic protectionism.

Nowadays, one of the most viable measures to help trans-boundary water pollution victims seek redress is to provide legal aid to them. The Zhaiwan village case indicates that water pollution victims are poor villagers and they lack necessary legal knowledge to resort to judicial tribunals. Among some above mentioned litigation obstacles, the high cost of litigation, weak capacity and limited resources directly prevent them from bringing a civil suit against the polluters in a court. Even if pollution victims do succeed in having their case heard, they can hardly win if local governments influence the courts.

Aimed to help victims obtain fair legal relief, legal aid should be enhanced and made it available for water pollution victims. For the Chinese people, legal aid has become more accessible due to the result of legislative change and judicial reform. The Centre for Legal Assistance to Pollution Victims (CLAPV), an environmental legal aid organisation in Beijing, is worth mentioning. Established in 1998, the CLAPV is managed by faculties affiliated with China University of Political Science and Law and is mainly composed of graduate students and lawyers. CLAPV volunteers provide legal aid and volunteer attorneys to people whose lives and livelihoods have been damaged by pollution. By providing free legal advice to pollution victims through a telephone hotline or representing pollution victims in the courts, CLAPV have achieved a few successful cases in the trans-boundary water pollution context. In spite of the achievement, the door to such legal aid organizations should be further opened in order to guarantee the protection of citizens’ basic legal rights and to prevent environmental injustices arising out of pollution.

(4) Citizen Enforcement and Public Interest Environmental Litigation

The experiences of western countries indicate that civil societies can play a vital role as an environmental watchdog. For example, by developing citizen monitoring activities that facilitate
involvement by civil society, governmental agencies can be assisted to identify the polluters in trans-boundary water pollution cases. Undoubtedly, civil societies promoting environmental protection could supplement the scarce government resources for enforcement and serve to supervise government agencies as well.

To promote citizen support in enforcement programs, governmental agencies in countries such as Australia and USA have established effective judicial mechanisms not only for stakeholders but also for the public at large to participate in trans-boundary water pollution issues. Most importantly, citizen enforcement through the courts plays a vital role in water pollution cases in some western countries. Their experience shows that governmental agencies can leverage civil society support in enforcement actions by means of cooperative support for citizen lawsuits or public interest litigation. The litigation, for the purpose of protecting public goods such as rivers or lakes, should be an important addition to the current environmental enforcement and judicial interference, which is generally based on private self-interest lawsuits.

By empowering citizens and civil society organizations to bring public interest environmental litigation, the governments can obtain more social resources to confront environmental violators and enforce waste water discharge and water quality standards beyond the limit of administrative jurisdiction.

In the United States and Australia, a body of statutes and cases has been developed to help citizens sue polluters or governments directly when polluters fail to comply with environmental law or governments fails to enforce environmental law. In the USA, beginning with the National Environmental Policy Act in 1970, the Congress passed a series of environmental laws designed to address a wide range of environmental problems. In particular, citizen suit clauses for environmental enforcement were established in the Clean Water Act in 1980s. These provisions allow the public to sue as “private attorneys general” to enforce violations of the law against polluters and failure of government agencies to carry out their responsibilities under relevant environmental law. By means of citizen enforcement based on citizen suit provisions, citizens can use lawsuits not only to seek injunctions and fines against polluters, but also to push government to take positive action. In Australia, public interest environmental litigation plays an indispensable role in environmental enforcement. Environmental NGOs such as the Environmental Defenders Office in Australia have successfully promoted environmental enforcement and implementation on the basis of public interest litigation.

By contrast, China still lacks a solid legal ground of public interest litigation. From the legislative point of view, China’s civil procedure law stipulates that a plaintiff is qualified only if this person has a direct interest relation with the case he/she is going to file. The provision makes it almost theoretically impossible to bring a lawsuit on behalf of public interest.

Fortunately, Chinese government now places a high priority on environmental issues, and the need to improve enforcement has been acknowledged. Despite the obstacles, there are signs that law and public advocacy will begin to play a larger role in China. China has already begun to experiment with some of the legal tools that have helped improve the environment in western countries. Among these tools, citizen enforcement through public interest environmental litigation should be attached more importance.
The Chinese government has recognized the significance of public interest environmental litigation to some extent. In practice, there has been isolated public interest litigation in China ever since 1996, including prosecutors bringing environmental public interest lawsuits against polluters for cessation of environmental harm, although such practices were not supported by Civil Procedural Law. The State Council issued a decision on environmental protection that specified public interest litigation as a favoured tool for environmental protection. Cases handled or supported by non-governmental organizations, GONGOs (government-organized NGOs) and public interest lawyers are an influential, though still limited, aspect of this phenomenon. Although some officials in SEPA have considered a public interest litigation framework that expands individual and NGO standing to bring suit in the public interest, from the practical point of view, it is unlikely that China will completely adopt the type of litigation that currently exists in western countries. One conservative proposal is to make the prosecutor act as plaintiff in public interest litigation again environmental pollution.

Particularly, the 2008 LPCWP makes some progress in terms of public interest environmental litigation although the law is not completely clear. For example, Article 88 of the law states that environmental protection bureaus (EPBs) and social groups may legally support the parties whose legitimate rights and interests are damaged in a water pollution incident to file a lawsuit. Although the word “support” is not synonymous with “represent” and appears to be a supplementary role for EPBs and social groups, this provision is probably the most specific and clearest provision in environmental legislation that says that NGOs have an active role to play in environmental litigation. In this situation, the courts’ attitude to public interest environmental cases is very important. In practice, most of the courts are less willing to take public interest environmental cases, while rare courts like Wuxi environmental protection court in Jiangsu Province have proclaimed that the public interest environmental cases are welcome in the court.

### 10. Environmental Pollution Insurance: A Supplementary Market Solution to Legal Relief for Trans-Boundary Water Pollution Victims

Aimed to help resolve the plight of trans-boundary water pollution victims within downstream jurisdictions, we have discussed some legal countermeasures in this report. However, this is insufficient by itself. Many of the measures discussed above need the broader panoply of reforms that China must embrace in order to achieve sustainable development and advance civil societies. For example, the lack of affordable health care in rural areas in China exacerbates the plight of water pollution victims. In Zhaiwan village, the health care costs associated with waterborne cancers and illnesses pose serious obstacles to obtaining effective treatment for the pollution victims. On the other hand, lack of compensation capacities of the polluters in trans-boundary water pollution cases also impedes legal enforcement and judicial adjudication. Even though the courts judge in favour of the victims, enforcement may not be assured as polluters may not be able to compensate for the damages in some cases.

While strengthening the legal regulation, environmental enforcement and access to justice in dealing with trans-boundary water pollution, measures such as market measures are also needed as a supplementary solution to the issue. Nowadays, one of the most viable solutions for China
may perhaps be to require all enterprises in certain high-risk industries to purchase environmental pollution insurance for trans-boundary water pollution. This was initiated by SEPA in 2007. The insurance would create the market for insurance companies to create profitable environmental pollution insurance products and help reduce the environmental risks of pollution.

Environmental liability insurance using market mechanisms is nascent in China today. For instance, Hunan Province launched a pilot environmental pollution liability insurance program targeting environmentally hazardous enterprises in the chemical, manufacturing, nonferrous metal and steel industries. However, the pilot program indicates that small enterprises lack the funds to buy the insurance, while large enterprises are willing to absorb the financial loss of any environmental accident without any liability insurance.

Environmental liability insurance, which is applicable to trans-boundary water pollution cases, is currently voluntary in China. SEPA has cooperated with relevant departments and enterprises to formulate policies and regulations that will further the scope and status of environmental pollution liability insurance in China. Once a market is made, market forces will encourage insurance companies to put in place various incentives for their customer enterprises to take stronger measures to reduce environmental pollution risks.

A system that aligns market forces with society’s interest in fewer environmental accidents can have a powerful impact on environmental quality in China, including on reducing trans-boundary water pollution cases. Environmental liability insurance is not a substitute for legal regulation, environmental enforcement and access to justice, but a supplementary economic incentive mechanism that may assist environmental legal regulation and judicial institutions to work effectively and completely.

**Concluding remarks**

Over the past three decades, the world has witnessed an economic miracle in China. While the GDP of the country grows steadily, an environmental crisis is looming over a land with 5000 years of history and civilization. From the rampant pollution of water, air and land, to the sharp ecological degradation of diversity loss, land desertification and wetland decline, China is now facing a whole spectrum of environmental threats. While ordinary Chinese people remain confused about future climate change, every day they suffer a variety of health and property damage from a deteriorating environment.

In terms of actual damage due to environmental problems, water pollution in China is no doubt ranks highest. As a result of nationwide water pollution, the Chinese people’s rights to clean drinking water is under threat. Over the past few years, serious drinking water pollution incidents have occupied the front pages of China’s newspapers: the Songhua River pollution incident in 2005, the Taihu Lake pollution event in 2007 and, in 2009, the Yancheng City water pollution incident. As a matter of fact, behind these three well-known examples, there are countless sad cases of drinking water pollution in China.
The threat of drinking water pollution is borne in a disproportionate way by disadvantaged people and rural communities. Facing potentially fatal health damage resulting from drinking polluted water, they are helpless and desperately need assistance from the governments, judicial bodies, environmental lawyers, environmental NGOs and the public at large.

As Premier Wen Jiabao pointed out on March 5, 2010, at a press conference of the annual session of the National People’s Congress, the nation's development should not only promote economic growth, but also pursue social fairness and justice to ensure every individual's all-round development in a free environment. The crucial issue of justice for victims of drinking water pollution calls to our moral conscience and demands legal action.

Acknowledgements

This report is the final result of research done under the International Development Law Organization’s Coca-Cola Water Fellowship Program. Especially, I would like to thank Ms. Patricia Parkinson at the IDLO Sydney office for her research suggestions, coordination efforts, and organizational work. Without her wonderful efforts, I could not have done the research with such a broad perspective.

To create legal solutions to critical environmental issue, China can certainly learn lessons from industrialized Western countries which have developed effective environmental laws and practices. I am indebted to many foreign friends in the field of environmental law who gave me suggestions, accepted my interviews and inspired my ideas while doing the research. I am grateful to Chief Justice Brian Preston of the Land and Environment Court of NSW, Mr Gordon Platt and Mr Alex Hill of the Department of Environment and Climate Change of NSW, Mr Jeff Smith and Ms Amelia Thorpe of the Environmental Defender’s Office of NSW, Prof. Rosemary Lyster and Ms Nicola Franklin at the Australian Centre for Climate and Environmental Law of the University of Sydney, Ms Robyn Johnston of the Murray–Darling Basin Commission, and Mr Tony McLeon of the Australian Department of Environment, Water, Heritage & Arts. These Australian colleagues shared with me their valuable experience and ideas for research.

I finished this research report while a Fulbright visiting scholar at the College of Law, University of Tennessee, USA, and my American colleagues gave me research assistance and suggestions. I would like to thank Distinguished Professor Dean Hill Rivkin for his erudite knowledge of American environmental law and Mr Sean Gunter for his research assistance. In addition, the China Environment Forum in Washington DC, presided by Dr Jennifer L. Turner, provided much useful research material on water issues in China.

Of course, I cannot forget my Chinese colleagues who helped me do the research and those people whom I interviewed in China. I am sorry I cannot list all their names here. Particularly,
however, I would like to thank Prof. Cai Shouqiu, Chair of the Environmental & Natural Resources Law Society, China Law Societies, for giving me invaluable research suggestions. Finally, I would like to extend sincere thanks to my team members and assistants, especially Ms Gao Qi, Mr Wang Jiebing and Ms Huang Yin.
Main References


End Notes

4 The monitoring covers 593 river sections and 152 lake or reservoir monitoring sites in China. According to China’s national water quality standards, there are five categories of water quality. Category 1 is applicable to national main water sources, national natural protected areas. Category 2 is applicable to class-one drinking surface water sources for intensive water supply, habitats of endangered & precious aquatic species, etc. Category 3 is applicable to class-two drinking surface water sources for intensive water supply, fishery water areas, swimming water, etc. Category 4 is applicable to water supply for general industrial purposes, water for entertainment use without direct contact with human bodies. Category 5 is applicable to water for agricultural use and water for sight-seeing.
11 Friend of Nature is the oldest environmental NGO in China (www.fon.org.cn).
13 Organic and inorganic pollutants are both main sources of water degradation threatening human health in China. Organic waste causes diseases including dysentery, typhoid, trachoma, and cholera. Inorganic pollutants are made up of metals, minerals, and toxic chemicals released by industries or improperly stored wastes, which are seriously degrading both surface and ground water in China. Inorganic effluent has been found to cause neurological damage, paralysis, and other serious health conditions and is a potential source of various cancers. See Judith Banister (1998), *Population, Public Health and the Environment in China*, China Quarterly 156: 986-1015.
16 For example, Dujiangyan Dam, which was built more than a thousand years ago, are still in use nowadays.
20 The push for increased reliance on alternative dispute resolution in U.S. environmental cases can support the points.
Aimed to strengthen environmental protection, the National People's Congress (NPC), the highest body of legislation in China, establishes specialized committees to assist in the development and analysis of laws. The Environment and Natural Resources Protection Committee of NPC is specifically dedicated to drafting and initiating environmental legislation.


The “three synchronizations” is a preventative tool which requires that design, installation and operation of prevention equipment coincide at the same time as project construction. Production at a facility may not begin without the local environmental bureau's approval of pollution control equipment.

SEPA refers to The State of Environmental Protection Agency, now Ministry of Environmental Protection, MEP. In the report, it is used as SEPA in a uniform way.


Before the adoption of the provision in the Amendment, SEPA had actually decided not to approve any new industrial projects in six cities, two counties and five industrial zones in the basins of the Yangtze, Yellow, Huai and Hai rivers in the name of environmental storm [What does this mean??] after a raft of drinking water incidents. Since these areas were seriously polluted, the relevant local authorities were given three months to rectify their environmental problems. The campaign led to the closure, suspension and renovation of more than 700 enterprises and projects in the river basins.


Both MWR and SEPA have the authority to release environmental information on China’s rivers, lakes and other water bodies. However, on some occasions the Huai River, water pollution data from SEPA and Ministry of Water Resources were contradictory, creating conflict and confusion for the public. As a result, the 2008 LPCWP requires that information about national water quality be released in a unified way. The new law specifies that the new Ministry of Environmental Protection is responsible for releasing information about the national water quality in a standardized way. However, the unified releases do not necessarily ensure that the public is provided with accurate and reliable information on water quality.

Judicial settlement of administrative disputes of trans-boundary water pollution is not provided by China’s legislation. Under the current legal system, there appears to be no avenue for addressing trans-boundary disputes except administrative negotiation and adjudication because the governments at the provincial and local levels are not allowed to sue each other under the current Chinese law. In the case of the failure to resolve a trans-boundary water dispute through the administrative process, the law should allow provincial or local governments to resort to the court system for trans-boundary water redresses, as Australian and the USA’s environmental law provide. In addition, China does not permit its environmental protection agencies to sue other governmental agencies that have allegedly violated environmental law. In the United States, the same measure is taken and EPA relies on expanded administrative powers and on executive orders that command other agencies to consider various environmental concerns. However, EPA in Australia can sue other governmental agencies for their failure of environmental enforcement and other violations.

The highest court is the Supreme People's Court. Below the Supreme People's Court, there are three levels of courts: Higher People's Courts, Intermediate People's Courts, and Basic People's Courts. Most environmental cases begin at the Basic People's Courts.