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我在青少年时代和大学时代通过阅读文学艺术作品编织于心中的大河憧憬，往往在见到大河的一瞬间破灭。作为工业文明的摇篮、载体和表征，大河期待另一种文明的到来——那就是生态文明，意味着我们需要重新审视以往一切工业文明的成果，在怀疑中寻找新的、基于自然的出路。生态文明能否在地球上繁荣，首先在于大河能否重现生机。

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**Photographer** Yu Kongjian

My fantasy for large rivers rooted from the stories and tales I learned during the teenage and college years burst into bubbles upon my arrival to real rivers. Large rivers that nourish, symbolize, and reflect industrial civilization are in bad need of a new civilization—ecological civilization—for its own rescue. We shoulder the responsibility to reexamine all that we have achieved in industrial civilization and dare to explore a new, nature-based path. The development and promotion of ecological civilization will first manifest in the rescuing and revitalization of large rivers.



# 大河的另一种文明

## Rescuing Big Rivers Damaged in Industrial Civilization

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### 摘要

每当身处大河河畔，编织于笔者心中的大河美景便被侵蚀一次：它们日益枯黄、残缺，甚至发出恶臭、形象丑陋。沿河的高堤不断向上下游延伸，拦河大坝越修越高耸、坚硬；夹河修建的道路不仅让渴望亲近水岸的人们望而却步，也阻挡了各种生命在水陆之间迁徙；大河支流被裁弯取直，自然的河流形态不复存在，污水排放问题严峻，河滩森林及湿地不断减少。这些要归因于人们自私的欲望和对自然敬畏的缺失。庆幸的是，生态文明的到来可以唤醒人们对一切自然世界之美的认知；推动系统认识河流生态系统及其服务，系统规划并实施国土空间生态修复；建立和完善针对大河流域的法律法规体系；破除对灰色工业技术冥顽不化的迷信。除了构筑更高、更硬的钢筋混凝土堤坝外，基于自然、富有韧性、更加可持续的生态防洪是保障大河水安全的更优途径，也是结束人水抗争、实现人水和谐的必由之路。

### 关键词

大河流域；生态文明；基于自然的解决方案；河流廊道；国土空间生态修复

### ABSTRACT

Large rivers with beautiful landscapes were dreamlands to the author. However, every time upon his arrival to riversides, he was shocked for the heavily polluted rivers that are dirty, messy, and smelling. Engineered dikes and dams made of concrete and steels for a greater height and hardness are built by cities along rivers. As more highways and railways built along rivers, vehicles run at a faster speed, scaring any life who wants to or has to access the water. Most of the tributaries are no longer free flow but end up as hard ditches and the water is polluted heavily. Forests and wetlands are being damaged and eroded. All of these are resulted from humans' material desires and lack of respect for nature. Nevertheless, ecological civilization may encourage people to appreciate the beauty of nature and get a thorough understanding on river ecosystems and their services, accompanied by systematic planning and implementation of territorial ecological restoration. Moreover, laws and regulations on large river management should be put in place, and efforts should be made to break the worship of grey engineering approaches to flood control. It is expected that nature-based ecological approaches for a better resilience and sustainability in flood management can be more effective to ensure water safety.

### KEYWORDS

Large River Basin; Ecological Civilization; Nature-based Solution; River Corridor; Ecological Restoration of Territorial Space

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关于大河，我的心中总是充满憧憬，这种憧憬编织于青少年时代和大学时代的阅读体验，穿插着陶潜的《桃花源记》、李白的《早发白帝城》、苏轼的《石钟山记》、王希孟的《千里江山图》、刘白羽的《长江三日》、马克·吐温的《汤姆·索亚历险记》和《哈克贝利·费恩历险记》等著作，还有《动物世界》纪录片中神秘的亚马孙河。那梦幻般的迷雾和江滩丛林，礁石、瀑布和险滩激流，静谧的水湾，植被茂盛的河中小洲和水岸沼泽；悠长的猿声和各种鸟语，还有突然露出水面的“怪兽”；水面上漂过的渔舟，岸上矗立的城堡废墟，炊烟袅袅的村庄，石埠岸边的浣女，河滩上暮归的水牛和孩童……这种憧憬一直伴随我、呼唤我走向河流，乘着舟楫顺流而下，体验李白、苏轼、哈克贝利·费恩等或曾有过的经历；或如武陵渔人和西方的丛林探险者那样驶入河湾，探索未知水源深处的秘境。

因此，不论是在哈尔滨、郑州、武汉、南京、重庆、广州，还是在新奥尔良、明尼阿波利斯、德里、达卡、西贡、曼谷，每到一处，我首先期待的是去看看这座城市或这个国家的母亲河。但每当我身处大河河畔，那存留在心中的大河美景便被侵蚀一次：它们日益枯黄、残缺，甚至发出恶臭、形象丑陋——恰如一轴描绘在丝绸上的《千里江山图》，由于富豪主人的不屑、傲慢、无知和庸俗，被搁在阴暗潮湿的地下室一隅，不见天日，直至发霉溃烂、被老鼠和蠹虫啃食。我禁不住和着众多母亲河保护者的呼声，大声呼喊：救救大河！

我看到沿河的高堤不断从河流所处的城市段往上下游延伸，一直从雪山脚下延伸至入海口！堤坝的材质从泥土逐渐升级为水泥和钢材，坚硬度和光滑度成为了工程质量的衡量标准；防洪标高也从10年一遇提升到50年、100年甚或500年一遇。这似乎已经成为城市文明程度和现代化程度的评价指标——文明到让后辈子孙再难有机会赤脚踏入河滩！

由于这一道又一道的拦河大坝，河水的拦截效率和发电效率不断提高，这似乎也已成为评价城市文明的另一个指标——文明到阻断一切只有逆流而上才能繁衍后代的鱼类，文明到阻隔一切借助河流廊道迁徙的野生动物！

我看到夹河修建的公路或铁路越来越多，路幅越来越宽，车速也越来越快，快到让渴望亲近水岸的人们望而却步，快到能瞬间扼杀一切胆敢在水陆之间迁徙和活动的生命！

我看到大河支流的命运更加悲惨，它们大多已经成为裁弯取直的硬质沟渠，自然的河流形态不复存在，河道不再蜿蜒动人；城乡生活污水、农田面源污染从这里排入大河，河水不再清澈，更不用说鱼翔浅底、鹭鸟翻飞。在世界范围内，超过80%的污水未经任何截

流处理，直接汇入大河与海洋<sup>[1]</sup>——这里已然成为工业文明的垃圾场。河滩森林不断减少，河流被疏浚、绿洲被蚕食，河湾、湿地日渐消失——这便是工业文明对大地的定义！

面对这些曾让我心怀憧憬的大河，我时常反问自己，人类的母亲河缘何落得如此境地？是恐惧，曾经的洪水可以吞噬一切生命和财产；是欲望，大河所蕴藏的能源和道路修建所带来的便利交通是城市经济发展的原始动力；是自私，不论是拦坝蓄水、高堤防水，还是河道排污，都是典型的公地悲剧<sup>[2]</sup>；是无知，直至今日，人类社会仍未意识到河流生态系统的全面自然服务是人类福祉的保障；是对自然之爱的匮乏，工业社会的物质欲望剥夺了人类与水亲近、热爱生物的本性。

庆幸的是，生态文明的到来似乎为解救大河带来了希望。首先是唤醒人们对河流、生物及一切自然世界之美的认知，将人类天性从工业文明物质欲望的桎梏和源远流长的洪水恐惧中解放出来。这尤其需要通过对儿童和青少年的自然审美启智来实现<sup>[3]</sup>。第二，系统认识河流生态系统及其自然服务，系统规划并实施国土空间生态修复，推进生态城市和海绵城市建设，以及海绵田园和生态农业建设<sup>[4]</sup>。这需要依赖生态文明价值观下大河流域水系统管理的转变。第三，建立和完善针对大河流域的法律法规体系，保障公平的自然资产分配和水系统监护权益，杜绝损害地方和社区权益的排污行为及河堤、河坝工程建设。第四，破除冥顽不化的对灰色工业技术的迷信。需要认识到，除了构筑更高、更硬的钢筋混凝土堤坝外，并非没有更合适的途径来保障大河的水安全。基于自然、富有韧性、更加可持续的生态防洪是结束人水抗争、实现人水和谐的必由之路。

基于上述大河解救方案，由艺术家、文学家和探险家们所描绘和编织的自由的、丰饶的、生机勃勃的、拥有万般诗情画意的大河美景有望再现。生态文明正是大河的另一种文明——它意味着我们需要重新审视以往一切工业文明的成果，在怀疑中寻找新的、基于自然的出路。

大河孕育着文明，也是文明的载体和表征。大河的生机意味着文明的兴盛，大河的衰退预示着文明的没落。因此，生态文明能否在地球上发展，首先在于大河能否重现勃勃生机。**LAF**

For me, large rivers were dreamlands. In teenage and college years, I was immersed in the stories and tales about misty rivers and forests, including *The Peach Blossom Spring* by Tao Yuanming, *Leaving the White King's Town at Dawn* by Li Bai, *The Stone Bell Mountain* by Su Shi, *A Panorama of Rivers and Mountains* by Wang Ximeng, *Three Days Along the Yangtze River* by Liu Baiyu, *The Adventures of Tom Sawyer* and *The Adventures of Huckleberry Finn* by Mark Twain, and the documentary *Animal World*. The rivers and forests were described as appealing places where waterfalls and torrents carve through rocks, in striking contrast to quiet bays and verdant sandbars and marshlands; the ululation of apes and silvery bird singing heard, “monsters” emerging from the water; fishing boats floating, castle ruins standing along banks, villages filling with wisps of smoke, women washing clothes on river banks, and kids riding buffaloes along the river at sunset... All these fantasies beckoned me to experience and explore rivers.

With this dream, when I arrived a new city—Harbin, Zhengzhou, Wuhan, Nanjing, Chongqing, and Guangzhou; or New Orleans, Minneapolis, Delhi, Dhaka, Saigon, and Bangkok—I was eager to visit their mother rivers. However, every time upon my arrival to the riversides, I was shocked for the heavily polluted rivers that are dirty, messy, and smelling—just like invaluable silk paintings discarded in the dark and moist basements for years by their ignorant wealthy owners. Please rescue the rivers! This is a cry from my heart with all the people who admire the mother rivers.

As engineered high dikes and dams made of concrete and steels (instead of clay, for a greater height, hardness, and smoothness under construction standards to resist 50-year, 100-year, and even 500-year floods) built by cities along rivers, people are “safely protected” from floods. All these engineering giants mark the development level of a city, compromising our grandchildren’s opportunities to connect with the water.

These dams indeed lower flood risks and increase power generation efficiency, cities become “civilized” barriers cutting off the river corridors for fishes and other wildlife to reproduce and migrate.

As more highways and railways built along rivers, vehicles run at an increasingly faster speed, scaring any life who wants to or has to access the water.

Conditions of tributaries are much worse. Most of them are no longer free flow but end up as hard ditches. As domestic sewage and agricultural non-point source pollution are dumped into rivers, fishes or birds no longer home there. Globally, over 80% of wastewater is discharged to rivers and oceans without treatment<sup>[1]</sup>, making them into garbage dumps of industrial civilization. As the industrialization process continues, forests, oases, river bends, and wetlands are being damaged and eroded.

I often ask myself that how did all these tragedies happen? It is the fear of floods which claims lives and property; it is the rapacity for energies generated by rivers and for convenient traffic to facilitate urban economic development; it is human selfishness that leads to the “Tragedy of the Commons”<sup>[2]</sup>, whether for dike and dam construction or sewage discharge; it is the ignorance of the ecosystem services provided by rivers that ensure human well-beings; or, it is the lack of love and respect for nature that results in human’s avarice for materials in the industrial civilization and the low willingness to connect with nature.

Nevertheless, it is fortunate that ecological civilization brings hope to rescuing large rivers. The first step is to encourage people to appreciate the beauty of nature, spiritually liberating them from material desires and dispelling the long-lasting fear of floods which especially relies on the aesthetic enlightenment for children and the youth<sup>[3]</sup>. Secondly, a thorough understanding on river ecosystems and the ecosystem services, accompanied by systematic planning and implementation of territorial ecological restoration, can propel the construction of ecological cities, sponge cities, and sustainable agriculture<sup>[4]</sup>. This requires mindset changes towards holistic water system management of large rivers and basins. Thirdly, laws and regulations on large river management should be put in place to guarantee the equitable distribution of natural resources and water system supervision rights, and to control sewage discharge and dam construction that undermine local and community benefits. Finally, efforts should be made to break the worship of grey engineering approaches to flood control. It is expected that nature-based, resilient, and sustainable ecological approaches to flood control can be more effective to ensure water safety.

In this way, we could restore the free, fertile, vigorous, and poetic landscapes along rivers as depicted by artists, litterateurs, and adventurers. Living in the age of ecological civilization, we shoulder the responsibility to reexamine all that we have achieved in industrial civilization and dare to explore a new nature-based path.

Rivers and civilizations are closely bound up—big rivers not only nourish human civilizations, but also symbolize and reflect the prosperity or decline of civilizations. In other words, the development and promotion of ecological civilization will first manifest in the rescuing and revitalization of large rivers. **LAF**

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