

DAMS ON THE WILD NUJIANG

The central government's seven-year moratorium on dam building in the Nujiang ("Angry River") watershed is soon to be lifted and China's last wild river will be wild no more. Last week, the Chinese National Energy Administration announced that hydropower development was now ready to move forward on the Nu.

The river that brought me to Yunnan six years ago is no ordinary river: It is big, wild, and, because of its incredibly steep drop off the southeastern edge of the Tibetan Plateau, features the most raucous rapids that I have ever seen. The Nujiang also flows through China's richest treasure trove of biological and cultural diversity; more endemic plants and animals along with many ethnic nationality groups are crammed into this watershed than any other place in the country. Whether the native peoples and wild species survive the coming onslaught of mega hydropower development is an open question.

Why is the central government lifting the dam moratorium now? At the risk of simplifying a complex issue, here are some numbers to ponder. Today, China burns more coal than the U.S., Japan, and the European Union combined, and the country's use of coal is set to grow for at least another 20 years. As a result into the foreseeable future, China will remain the world's largest emitter of greenhouse gases.

The central government wants to do everything it can to limit China's carbon footprint and hydropower from dams must be part of the solution. By 2020, Beijing is committed to getting 15 percent of national energy from non-fossil fuel sources including hydro, nuclear, wind, solar, and others. If China is to get close to this goal, it will need to add 140 Gigawatts (GW) of new hydropower to the system. At full development, the Nu can produce about 21 GW of this total; for comparison, China's Three Gorges Dam—the largest in the world—contributes some 18 GW.

What these figures show is that even with the dams on the Nujiang, China's hydropower goal still requires numerous dams on other rivers all across China that will need to generate electricity equivalent to another six Three Gorges dams. Few sites on any Chinese river are going to escape the engineers' eye even though the country already has more dams than any nation in the world. In fact, it is hard to imagine any river anywhere in China, including those in still-undeveloped Tibet that over the next decades will remain free-flowing for any appreciable length. But in losing its rivers, China will be gaining a partial solution to the staggering load of carbon that it is releasing into Earth's atmosphere.

The question is: Will all this energy development be enough to slow and eventually stop the growth of China's carbon emissions? The answer is, no one knows. One can say for sure that without dams on the Nujiang, monster nuclear power plants, and world leadership in new forms of green energy production, China doesn't stand a chance to gain control of its emissions.

But the cost to the country's species, ecosystems, and rural people will be high. As long as the international community continues to drag its collective feet on controlling carbon emissions and climate change, rivers like the Nujiang everywhere on the planet will be at risk.

Source: <http://ipfieldnotes.org/dams-on-the-wild-nujiang/>