



Nicaragua stands to lose around one million acres of rainforest and wetlands if the new canal is built. (Photo: [Keith](#))

Nicaragua Plans to Bisect the Country With a Massive Canal

The canal would cause “tragic devastation” to both the country’s natural heritage and indigenous communities, scientists say

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Central America could soon have not one canal but two connecting the Pacific Ocean to the Caribbean Sea. Last June, Nicaragua signed a bill that granted approval for a Chinese company called the Hong Kong Nicaragua Canal Development Investment Company (HKND) to bisect the country with [a massive \\$40 billion canal](#).

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According to HKND and the Nicaraguan government, the Inter-Oceanic Nicaragua Canal would increase Nicaragua's GDP by 11 percent annually and provide up to a million new jobs in the years following the canal's construction. This would be a significant boon to the country, which is the [second poorest](#) in the Americas. The canal would also expedite global trade, proponents add.

Construction is slated to begin in December this year and continue for the next decade, give or take a few years. Industrial centers, airports, new railways, oil pipelines and the rights to any natural resources lining the new canal are also included in the agreement. After building the canal, HKND would maintain rights to operate it for the next 50 to 100 years.

Environmental and social worries about such a project are numerous, however. Many details about the project are still lacking, namely, where the canal will be built. Currently, a 177-mile route that would cut through Lake Nicaragua—where most of the country's drinking water comes from—is the favorite option. What its impacts would be on both biodiversity and local people have not been discussed publicly.

A new comment paper published in *Nature*, "[Nicaragua Canal Could Wreak Environmental Ruin](#)," spells out concerns from [Jorge A. Huete-Perez](#), president of the Nicaraguan Academy of Sciences, and [Axel Meyer](#), a zoologist at the University of Konstanz in Germany. For starters, they point out, no independent environmental assessment of the canal's potential impacts has been conducted. The Nicaraguan government says it plans to rely instead on an

environmental impact assessment conducted by HKND, and the authors point out that “the company has no obligation to reveal the results to the Nicaraguan public.”

The canal as planned, Huete-Perez and Meyer write, would destroy around 400,000 hectares (nearly one million acres) of rainforest and wetlands. The Bosawas Biosphere Reserve is located just north of proposed canal route and houses numerous endangered species such as [Baird’s tapirs](#), spider monkeys, jaguars and harpy eagles, while the Indio Maiz Biological Reserve is situated just to the south holds a similar assembly of endangered species.

The canal doesn’t even bother to skirt around the Cerro Silva Nature Reserve—home to the oldest oak trees in central America, numerous types of monkeys and populations of bright green [quetzals](#)—the authors point out. Plans have the waterway cutting straight through that park’s northern section.

The canal and its accompanying ports would also bulldoze over endangered sea turtle nesting beaches on both the Atlantic and Pacific coasts, as well as impact or destroy coral reefs and mangroves, which—in addition to their importance for biodiversity—help buffer inland Nicaragua from tropical storms. As for land animals, those that cannot fly could no longer migrate north to south, cutting species populations off from one another like a watery Berlin Wall.

In addition to impacts on wildlife, [indigenous communities](#)—including the Rama, Garifuna, Mayangna, Miskitu and Ulwa—depend on the areas where the proposed canal will be located. No proof has emerged that their rights have been taken into consideration or allocations have been made to make up for disruptions to their lives, the authors note. “Hundreds of villages will have to be evacuated and the indigenous inhabitants relocated,” they write. This disruption might even be enough to trigger civil strife.



The Nicaragua canal's proposed routes (red) and the Panama canal (blue). Photo: Soerfm, Wikicommons

Water is also an issue. Most of the country's drinking water comes from Lake Nicaragua, whose 15-meter-deep bottom will be dredged to nearly double that depth to make way for huge container ships. All that sludge has to go somewhere, and the authors worry it will just be dumped into other sections of the lake or even on the land. "Either way, the sludge will probably end up as damaging sedimentation," they write.

Dams, too would be constructed in the lake for creating the canal's lock system. As with the Panama Canal, salt water along with pollution from ships would likely infiltrate the areas around those locks, transforming "a free-flowing freshwater ecosystem into an artificial slack-water reservoir combined with salt water," the authors predict. This means good-bye fresh drinking water—infrastructure would have to be created to desalinate and purify it—as well as adieu to native [lake animals](#) such as bull sharks, sawfish, cichlids and tarpon.

Add to that the possible arrival of invasive species hitchhiking on ships—a common environmental problem—and you've got a recipe

for “tragic devastation” of the lake’s flora and fauna, and all who depend on it, the authors write.

Finally, the company behind the canal itself may not be all that it seems, others point out. The chairman, Wang Jing, has so far failed to follow through on developing a telephone company he bought concessions for in Nicaragua last year, and there is likewise no signs of progress in 12 of the 20 countries where Wang has committed to other large-scale projects, [the South China Morning Post reports](#).

In the case of the canal, Wang has at times expressed “implausible” plans, the *Nature* authors write, such as saying that the canal will be 520 meters (1,700 feet) wide. The entire project has so far has also been shrouded in secrecy, [the Bangkok Post adds](#), from its environmental impacts to its logistics, and the government seems eager to hurry it along.

“There is no justification whatsoever for a new canal through Nicaragua,” Ralph Leszczynski, head of research at Banchemo Costa, an international maritime agency, told the Bangkok Post. “We already have a canal through Panama that works pretty well.”

The Panama Canal, Leszczynski told the Post, handles only a small fraction of world shipping, so building an equivalent waterway would be redundant. About 550 miles south of Lake Nicaragua, the Panama Canal waterway is less than one-third the length of the one proposed in Nicaragua, and is currently being widened and deepened to expand its capacity to accommodate large ships.

So, at worst, Nicaragua will get a massive canal that might bring environmental devastation to the country and could perhaps even “reignite the civil violence that has long blighted the region,” the *Nature* authors write. At best, on the other hand, plans will simply fall through, like many of Wang’s other ventures. Either way, the researchers do not want to take the chance of such a project even being considered.

They call for the international community to join together in protest of the canal, and also in brainstorming solutions that could bring much-needed revenue to Nicaragua, including tourism, aquaculture

and expanded irrigation. Last December, the authors report that the government dismissed legal complaints filed last year by both international groups and indigenous Nicaraguan communities, indicating the need for “swift and decisive international action.” Additionally, Huete-Perez has decided to take matters into his own hands and conduct his own environmental assessment with the support of the [InterAmerican Network of Academies of Sciences](#), and calls for more conservation groups to join him.

“Might there be an economically, geographically and politically feasible route for the proposed canal, railway and oil pipeline that would entail significantly reduced risk? The general consensus in Nicaragua is no,” the authors conclude. “Inhabitants—of all species—with ancient ties to the land will be uprooted regardless.”