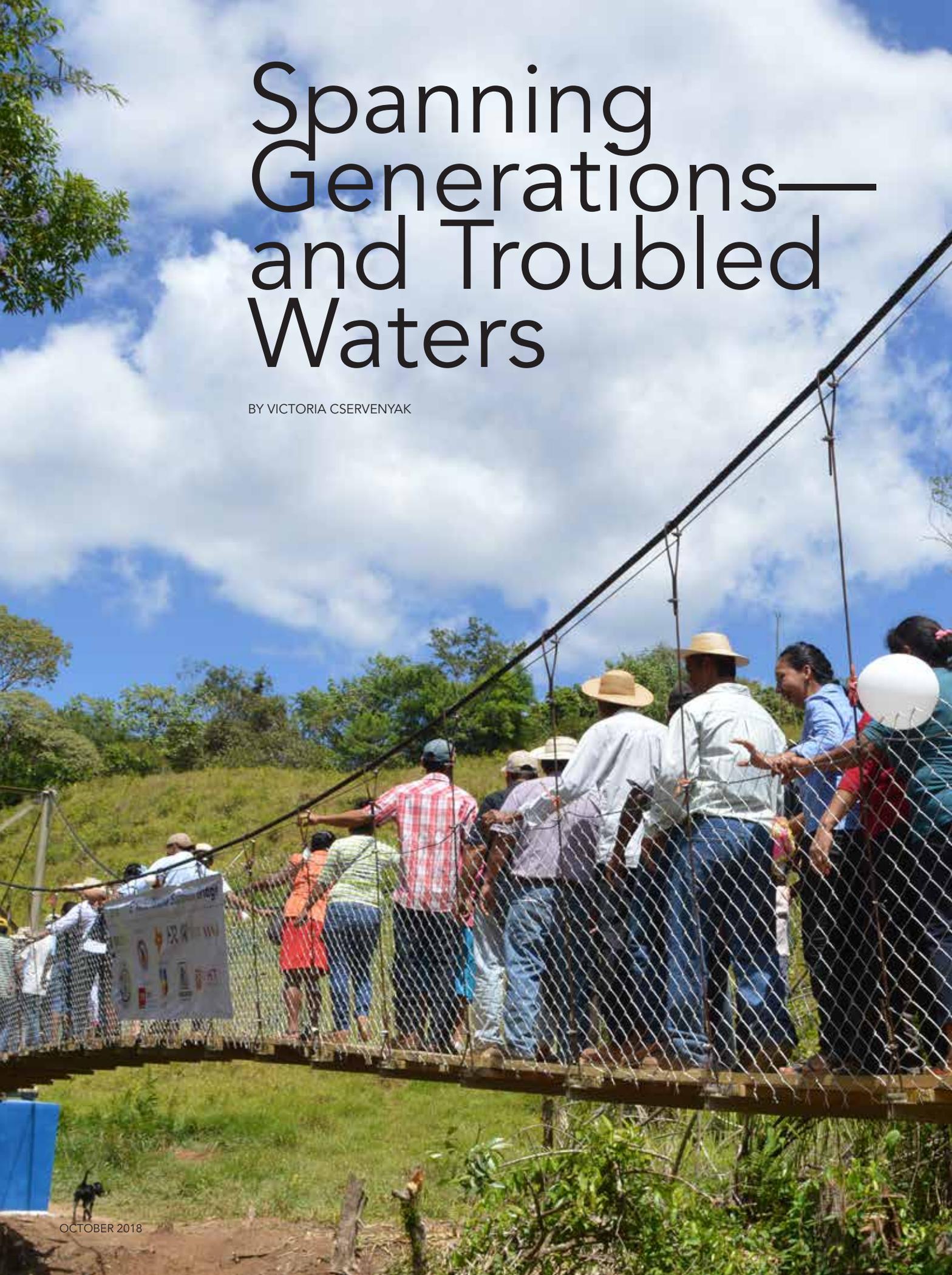


Spanning Generations— and Troubled Waters

BY VICTORIA CSERVENYAK





A team of bridge professionals connects a remote Panamanian village to nearby communities with a new bridge over a treacherous river.



IN AN ISOLATED jungle community 30 minutes from the nearest town, an 80-year-old woman hesitantly crosses a suspension bridge over the Tuancle River nearly 100 ft below to her family on the other side.

Following behind, two children laugh and romp along the bridge, gliding their little hands across the chain-link fences on the sides.

At the foot of the bridge, a man speaks about how going forward, this day will have a happy meaning for him and his family, who several years earlier had a son die on the same date.

The 100-ft-long El Macho Puente (puente is Spanish for bridge) opened this past spring and the nearly 200 residents of the village—for which the bridge is named—are celebrating their newfound freedom of safely travel-

left: El Macho residents test their new bridge.

above: Building the bridge over the Tuancle River.



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ing to and from their Panamanian hamlet over the river.

New Bridge, New Hope

But less than a week before this celebration, no bridge existed.

Spring is the dry season in El Macho, which lies about 200 miles west of Panama City. So the river, which geographically quarantines the remote area from larger towns, is only about 1 ft deep and even becomes a dry riverbed in some places.

But it's a different story during the rainy season, when villagers are sometimes forced to traverse the rocky riverbed to reach nearby communities—and are sometimes simply unable to make it. During the rainy season when flash floods are common, the

water can surge to more than 6 ft high, making the river impassable. Recently, a few men were carrying a sick friend on a hammock, attempting to take him to the doctor. When they arrived at the river, the water was too high and before it could recede enough to cross, the man died.

Six months before the first bridge tower was installed, plans commenced to build a footbridge in El Macho across the river. And over the course of three months prior to the bridge's opening, Maria Rodriguez, the Panama country manager; Daniel Magallon, Bridges to Prosperity (B2P) mason; Chase Luckey, B2P fellow (volunteer); and the El Macho community worked to create the foundation.



Carter Bearden and Gary Kinchen installing decking near the middle of the bridge span.

Patrick Montgomery and team putting together scaffolding.



John Hastings and Jeff Carlson installing hanger assemblies.



Camaraderie and Colleagues

Since leading his first volunteer trip with B2P in 2016, Jeff Carlson, NSBA's director of market development, has been enthusiastically committed to the organization's mission. Whenever he meets with the AEC community, he evangelizes about the need for footbridges in rural areas throughout the world—which is how the El Macho team formed. In addition to Carlson, team members included Carter Bearden (HDR); John Hastings (Tennessee DOT); Marne Helbing (Tennessee DOT); Gary Kinchen (New Mexico DOT); Patrick Montgomery (Fought and Company, an AISC member and certified fabricator); Carlos Ramirez (WSP); Michelle Romage-Chambers (Texas DOT); and Scott Wilson (Palmer Engineering).

When the team began their trip, they were not familiar with each other, yet bonded as they worked seamlessly without construction issues or personality clashes.

"The most memorable part of the bridge for me was twofold," said Carlson. "First, everyone on the team worked well with one another. They were all respectful of their fellow teammates, the B2P staff and the local community. Second, I was impressed by how organized the B2P Panama staff was for our project."

"Our group had a lot of camaraderie," added Wilson. "We could have fun and at the same time all work hard towards the same goal, which was a benefit I didn't expect."

The group's gregariousness helped each team member to adroitly



The completed El Macho Bridge before the inauguration ceremony.



and quickly discover how to best use their individual skills to benefit the group as a whole. As a fluent Spanish-speaker, Ramirez harmoniously coordinated the community members and Kinchen cheerfully supervised the fabrication and rebar cutting on the ground, while the other team members constructed the towers and assembled the remaining pieces. Montgomery, as a fabricator, attempted not to heckle his team members, who were adjusting from their usual computer work to onerous manual labor.

“Most bridge designers are not used to hands-on experience, and to suddenly take a concept on a piece of paper and translate that into an actual built structure was a challenge at first,” Kinchen explained.

However, Montgomery was happily astounded by his teammates’ enthusiasm. “All the engineers were down-to-earth and ready to go to work,” he said. “You hear that engineers are going to be finger-pointers. But every single one of them wanted to get their hands dirty. And they did.”

Kind-Hearted Community

With both the temperature and humidity in the 90s (degrees and percent, respectively) the team spent the first day acclimating to the steamy climate, then dove in to

Children excitedly skipping across the bridge for the first time.

The B2P team celebrating the completion of the El Macho Bridge—and holding up Jeff Carlson.



work side by side with the El Macho residents to construct the bridge. It was essential to the B2P team that the community members take an active role in construction so they would know how to make future repairs to the bridge as necessary. Throughout the week, between 15 and 25 community members assisted with construction, spanning from 12-year-olds to octogenarians, and even more inhabitants made the American team feel extremely welcome. Each morning, two women walked for two hours to cook breakfast over a fire. Families invited the group into their concrete-walled, dirt-floor homes for lunch, and other community members cooked them dinner at the campsite at night. The villagers even built a hut made out of palm branches for the workers to take a reprieve from the blistering sun.

Once the crew arrived in El Macho, two weeks were allotted for building the bridge and despite a few minor injuries, they completed the project in six days.

“It’s so gratifying to do something else that goes along with the skills that you have, especially in places where they’re desperately needed,” Ramirez said.

In addition to the gratifying work, the friendships formed also made the trip an unforgettable experience. Getting to know the community was the highlight of everyone’s trip.

“It’s really a neat relationship that you gain working with them and working with a lot of people you don’t know; you get to know them well over that two-week period,” Hastings said. “Everybody was wonderful. The whole experience was wonderful.”

Although they started off as strangers, the team members were so invigorated by their journey to Panama that they have already begun to plan the next B2P opportunity. ■

Building Bridges

Through local engagement, from regional governments to members of each partner community, Bridges to Prosperity (B2P) is committed to a sustainable model that puts the focus on people and the opportunities that make it possible for them to thrive. In 2018, B2P will complete 39 new footbridges, increasing its overall total to 279 bridges and impacting more than 1,000,000 people since 2001.

To learn more about B2P, how you can become a volunteer or industry partner or to support its mission, visit www.bridgestoprosperty.org.