

ANNUAL PROJECT UPDATE 2020-2022

Westside Water Association and Maury Mutual Water Co.

1. Organizational Background

Organization Name: El Porvenir

Webpage: www.elporvenir.org

Local Contact/ Title: Rob Bell, Executive Director

Email: rob@elporvenir.org Nicaragua Telephone/Fax: +505-2268-5781

Nicaragua Address: Apartado RP-71, Managua, Nicaragua

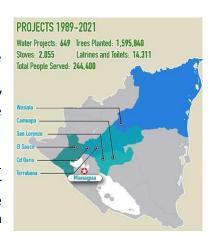
US Address: 80 Garden Center, Suite 135, Broomfield, CO 80020

US Telephone/Fax: 303-861-1499 EIN: 68-0230597

El Porvenir is an international non-profit organization founded in 1990 to empower rural Nicaraguan communities to improve their living standards through the sustainable development of clean water, safe sanitation, health education, and watershed restoration. El Porvenir has over 30 years of experience helping rural Nicaraguan communities build appropriate technology (wells, water systems, latrines, community washing stations, and fuel-efficient stoves) as well as providing communities with the tools they need to manage their water, sanitation, forestry and watershed resources. El Porvenir's methodology is based on three key principles:

- (a) community empowerment through active participation and ownership in all aspects of the project,
- (b) creation of sustainable organizations in the community to manage resources in the long term, and
- (c) a focus on appropriate technology made from low-cost locally available materials that can be maintained easily and cheaply by the community.

To date, EP has worked with rural communities in: 649 water projects, 14,311 latrines and toilets, 2055 fuel-efficient stoves, 1.5 million trees planted and over 244,400 Nicaraguans have clean water and sanitation. Currently, the organization has its U.S. office in Broomfield, Colorado. In Nicaragua, the main office is in Managua with regional offices in Ciudad Darío, Terrabona, Waslala, Camoapa, San Lorenzo and El Sauce.



2. Project Need

Rural communities across Nicaragua lack access to clean water, improved sanitation facilities, hand-washing stations, health and hygiene information, and the training to restore damaged watersheds. Although villagers recognize the need for improved water and sanitation, they cannot afford to purchase the construction materials themselves. With a per capita GDP of \$1,905¹, Nicaragua is the second poorest country in this hemisphere. It is

¹2020 GDP per capita in current US Dollars. http://databank.worldbank.org.



estimated that 50.1% of the rural population lives below the national poverty line². In the past decades, the country has been victim of natural disasters and civil war that have destroyed infrastructure, drained resources and derailed the country's economic development. Last year was particularly devastating, when Nicaragua was hit by back-to-back hurricanes in the span of two weeks, during a global pandemic.

In 2021, a World Bank report³ mentioned that poverty in Nicaragua is concentrated in rural areas, where more than 40 percent of the population lives. Over a third of people in rural areas lack access to piped water and adequate sanitation. Lack of adequate water and sanitation increases infant mortality and child malnutrition. Globally, contaminated water is the second greatest cause of infant mortality; an estimated 1.8 million children die each year as a result of illnesses linked to consumption of polluted water. The integrated approach of water, sanitation and hygiene education reduces the number of deaths caused by diarrheal diseases by an average of 65% (WHO). Only with clean water, improved sanitation and healthy habits can individuals improve their standard of living.

3. Project Objective

The objective of the project in 2021 was to improve the health and living standards of poor, rural Nicaraguan communities by expanding water and sanitation coverage. Specifically, the project sought to provide improved sanitation in two schools (one in Ciudad Dario region of Matagalpa and other in San Lorenzo region of Boaco) also improve clean water access through well rehabilitation in one community in Ciudad Dario, Matagalpa. El Porvenir supported and trained the communities to:

- build and maintain latrines and handwashing stations, and
- implement good hygiene practices to reduce disease and illness.

Completed Project Locations

- Community Names: Las Cañas, La Flor, Los Cocos, El Maniadero, Limón Dulce
- Municipality: Ciudad Darío/San Lorenzo
- Department: Matagalpa/Boaco
- Project Type: school and community latrines, spring capture and a well rehabilitation
- 2021 Beneficiaries: 1,129 people
- Total WWA/MMA Beneficiaries to date: 3,830 people



² Rural Poverty headcount ratio at National Poverty Lines. http://databank.worldbank.org/2014 data.

³ World Bank, https://www.worldbank.org/en/programs/sief-trust-fund/brief/nicaragua-sustainable-water-and-sanitation-sector-project



4. Community Descriptions

The communities are all small, rural villages comprised of subsistence farmers. Due to their small size and remote location, residents usually don't receive assistance from the government or other organizations to address their water and sanitation needs. Families in these communities live in extreme poverty surviving on less than \$71 a month. Many families have adults that migrate to Managua, Costa Rica, Panama or the United States to earn money and send remittances back home.

- **4.1.** Las Cañas is located 28 km east of the town of Ciudad Darío and is comprised of 87 families and 320 people. The community members get by as subsistence farmers of agriculture: mostly corns, beans and wheat. The average family monthly income is \$71/month. The community has an elementary school which attended 120 students. The school latrines were in poor condition, they were built 20 years ago and represented a dangerous for the kids.
- **4.2.** La Flor is a rural village located 15 km west of Ciudad Dario. In the community lives around 112 families. The inhabitants are subsistence farmers, raising corn, beans and millet, and have an average family income of \$70/month. The community has a small school where 85 students' attend primary level classes from Monday to Friday. On the weekend, this school has students from secondary school. The community has problem with water access, the well had a low water level and the infrastructure was in poor condition. They requested help to dig their well deeper.
- **4.3. Limon Dulce/La Pitahaya** is a rural community located 38 km southwest of San Lorenzo, but in the rainy season, it is difficult to access the community as the rivers rise. The inhabitants work as day laborers in rice farming nearby. The elementary school, Francisco Rugama, lacked a safe sanitation facility, and the ministry of education did not have funding to improve them. This school has students from two communities (Limon Dulce and La Pitahaya).
- **4.4 Los Cocos**: this community is located 15 km to west from Ciudad Dario, Matagalpa. This community has 62 families which principal economic activity is agriculture mostly corns, beans and wheat. Similar to other communities during the dry season, (mostly) men go abroad to Costa Rica to work and send money to their families and in the rainy season they come back to work on the land. This community lacked access clean water for that reason the community and El Porvenir worked together on this project.
- **4.5 El Maniadero:** The community is located to 37 kilometers southwest of the town of San Lorenzo. The inhabitants work on nearby rice farms, and the average family income is around \$140 per month. This community was affected by hurricanes Eta and Iota in 2020, and as a consequence, the sanitation and water infrastructure were damaged and this presented a risk to the community.

5. Project Activities

All projects start with a community request for assistance. To ensure project sustainability, all communities are prescreened to determine their level of commitment to the project. The community must be willing to play an active role, providing labor, coordination, transportation of materials, and other available local resources while El Porvenir provides technical assistance, tools, and materials for the construction of wells, water systems, latrines, community wash stations, fuel-efficient cook stoves, and tree nurseries. Throughout the project, the Managua-based director, field supervisor and accounting staff monitor progress and expenditures. Once the community completes construction of the infrastructure, they are responsible for ongoing maintenance and repair. A follow up survey is undertaken to assess impact, and follow up visits are done by EP staff every 3-6 months for the first year in order to reinforce trainings, identify any problems, and assist the community in resolving them.



6. Project Results & Impact

The completed projects (2021) generated the following outputs and results:

- 1,129 people with access to improved sanitation and clean water
- 76 latrines built (70 in community, 3 each at 3 schools); 1 hand-dug well and 1 spring capture.
- Reduction in incidence of water- and sanitation-related diseases (skin infections, parasites, bacterial infections, diarrhea etc.)

7. Project Status 2021

Community Name	Project Type	Number of Beneficiaries	Status
La Flor	Well Rehabilitation	472	The well rehabilitation is complete with ongoing health education support
Las Cañas	3 double-pit latrines	90	These latrines are complete with ongoing health education support
Limon Dulce-La Pitahaya	3 double-pit latrines	57	These latrines are complete with ongoing health education support
El Maniadero	70 double-pit latrines	400	These latrines are complete with ongoing health education support
Los Cocos	Spring Capture	110	The Spring capture complete with ongoing health education support

8. WWA and MMW 2007-2021 Project Expenses

WWA/MMW Project Donations

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Year	Amount					
2007	\$	2,015.00				
2008	\$	3,007.98				
2009	\$	3,425.00				
2010	\$	4,013.94				
2011	\$	3,611.29				
2012	\$	4,390.00				
2013	\$	2,682.80				
2014	\$	4,258.01				
2015	\$	3,393.96				
2016	\$	5,503.73				
2017	\$	4,264.47				
2018	\$	4,239.51				
2019	\$	4,539.31				
2020	\$	3,739.10				
2021	\$	3,611.38				
2022	\$	521.00				
Total	\$	57,216.48				

WWA/MWA Project Expenses to date

Expense		Amount	
Project Materials	\$	51,550.22	
Staff, travel to communities	\$	7,999.53	

Total	\$ 59,549.75

Donations provided by WWA and MMW through 2022 total \$57,216.48 and have supported some 3,830 community members. The outstanding expenses will be covered by donations once the next gift is received. Funding over this time has been used to partner with 39 rural Nicaraguan communities/schools to build water and sanitation infrastructure, including:



- 160 latrines
- 2 spring captures
- 1 piped water system
- 3 well repairs
- 7 new wells (6 hand-dug, 1 drilled)
- 3 washing and bathing station
- 60 bio-sand filters
- 7 school hand-washing stations

Specifically, the support has been allocated to cover the cost of:

- project materials (sand, cement, bricks, rebar, pipes, rope pump, buckets, etc.)
- a portion of the El Porvenir field staff time that works with the community providing technical assistance
- the operational expenses of the motorcycles (and related travel costs) used by the staff to travel to the communities

The beneficiary communities provided labor on a volunteer basis. It is estimated that the labor required for the construction of the infrastructure completed since the last report is 135 person-days, valued at \$646.48, and since 2007 this total: \$19,550 in labor.

El Porvenir would like to thank the Westside Water Association and Maury Mutual Water Co.⁴ for providing ongoing support and funding to El Porvenir's rural water and sanitation projects for 15 consecutive years.

⁴ In 2009, the Maury Mutual Water Co joined Westside Water Association in supporting these projects.



Latrines Las Cañas School





Yadira del Socorro Aguirre Espinoza, is 29 years old and she is the parents' representative for Las Cañas school in Ciudad Darío.

Mrs. Aguirre comments that the girls and boys from this school did their physiological needs in an old latrine that was bad condition, the doors did not work (so no privacy) and it was full.

The latrines in our school, one for teachers and another for girls and another for the boys came to improve our hygienic habits and give safety to our kids. We worked alongside to El Porvenir to build this project. Thanks to the donor, the girls, boys and teachers have a decent place to relieve themselves and this help to maintain our school clean.

"It was a awesome project and the community is very grateful," said Mrs. Aguirre.

As parents, we supported with digging of the latrines and other labors to complete them. "I liked working on this project and I would love it if the donors and El Porvenir continue supporting the school and the community," said Yadira. She emphasized that they are aware that a project like this requires a lot of effort and investment, that is why they commit to maintain this project for many years. "I want to tell to teachers that we as parents



we will continue to support this kind of project and the children that they need to take care of the latrines to have a safe space for a long time," Yadira Aguirre concluded.

10. Project Photos:



Students and teachers in School las Cañas, Ciudad Dario.



Sanitation facilities in Las Cañas Ciudad Dario.



Digging well in La Flor community, Ciudad Dario



Families in La Flor community are happy with the well facilities improvement.







Digging works in Limon dulce/La Pitahaya School.

Kids in Limon Dulce/Pitahaya School.