

**Category or Type Name:** SOURCE for Schools

**Site Name:** Los Mochis Schools

**Location:** Los Mochis, Sinaloa, Mexico

**Climate Type:** Semi-Arid

**Array Size:** 3 School Installations – 26 SOURCE Panels

**Developer/Distributor/Organization:** National Institute of Physical Education Infrastructure



### Use Case

This pilot installation was proposed in three community education centers that were selected jointly with INIFED. SOURCE panels produce between 2-5 liters of water per day on average, based on location and climate data. The intent of the project was to create an array of panels to exceed the water demand for students at each school.

SOURCE provides the students and teachers at these rural schools in Sinaloa with continuous access to safe, delicious drinking water. The installation at the schools demonstrates the viability of installing SOURCE panels on the ground, maintaining security of the water, and providing safe drinking water over time.

### **SOURCE at Los Mochis Schools**

To optimize water availability at the school, it was determined that 26 panels would be installed across the three sites. The installation steps and data collected from this pilot test during the last week of January 2017 are described below.



Site visits were coordinated with the National Council for Educational Development 2 (CONAFE) to determine to the location of the installations and the installation work required. Site layouts were then completed based on the initial evaluation.

The delivery and installation of the 26 panels at the 3 school locations was completed during the week of 23 January 2017. The installation plan was divided into the following stages:

- a) Site preparation – gravel was used to level the landscape and provide drainage. Fencing was installed to provide security around the array of panels at each school.
- b) Panel Installation – Panels were assembled and then oriented to optimize solar exposure. Dispensers were installed on concrete block walls at the schools.
- c) Water connections – Tubing was installed to connect the panels to the dispenser.
- d) Testing and verification – Panel operation was verified and water quality tests were performed on site.

### Field Data at Los Mochis Schools

Average RH: 65

Average Flux: 803

Average Production: 3.3 L/Day

People Served: 89

City	School Population	Week 1	Week 2	Week 3	Week 4
<b>Campo Gastelum</b>	35	37.1	41.5	31.9	43.1
<b>Huatabampito</b>	27	25.4	22.0	27.5	38.6
<b>Huacaporito</b>	27	29.7	33.1	24.8	34.9

### SOURCE Usage and Satisfaction

*"The community, the parents and all of us are very happy to have clean water, because sometimes we did not have bottled water."*

*"The project seems very good because we do not have to buy water from the jug and the children used to go and drink water from the tap which then goes dirty."*