CERTIFICATION AND FINANCING PROPOSAL

ALTERNATIVE DRINKING WATER SUPPLY FOR FIVE SCHOOLS IN MONTERREY, NUEVO LEON

Submitted: June 14, 2024

CONTENTS

INTRODUCTORY NOTE

Water supply issues are a chronic problem for the municipality of Monterrey, Nuevo Leon, which have been exacerbated by several periods of drought, as well as double-digit population growth. After years of drastically declining water supply capacity in the reservoirs, the local utility has resorted to emergency source management practices, such as water rationing with access to water only six hours a day. In many subdivisions, residents have reported receiving water only three hours a day and at very low pressure, which creates additional concerns for water quality.

Due to the lack of water service, many local schools have been required to close periodically or modify their schedules to avoid health risks for students, such as dehydration or other ailments. In fact, the schools selected for this project were closed for nearly eight months, from February to September, in 2022. While hauled water has become essential for daily residential needs, it has not been an option for these schools because of the high cost of transport and storage, difficulties in accessing school sites due to the natural terrain and security issues for the water haulers.

Since the ongoing water shortages in Monterrey cannot be resolved in the short term, alternative methods are required to provide water to meet current needs, especially for the more vulnerable populations, such as young school-age children. In this case, NADBank's Community Assistance Program is a useful source to support small investments for the development of novel solutions when traditional infrastructure investments may not be feasible.

The proposed project will provide an alternative drinking water source generated using an innovative hydropanel technology that extracts water from ambient humidity to produce potable water. The water harvesting systems will include a total of 108 hydropanels to be installed at five schools in marginalized areas in the northern region of the municipality. Each panel is equipped with a system to condense water from the air. Photovoltaic cells and batteries allow each panel to be a stand-alone unit. Individual panels include small reservoirs to retain collected water which is sterilized and mineralized to improve its taste and fitness for consumption. The panels will be installed in vacant areas on school property and will be connected to distribution systems in the schools, allowing students to access water from a water fountain or dispenser.

The project has advanced with strong coordination between the City, State and the hydropanel manufacturer. The Municipality of Monterrey has authorized its Department of Sustainable Urban Development (SEDUSO) to implement the project, and the Nuevo Leon Office of Prevention and Health Promotion, through an agreement with SEDUSO, will take water samples and test the water quality for compliance with regulatory standards. Agreements between the City and State have been established to allow the panels to be installed on school property. The five schools selected were identified through hundreds of requests submitted to the Municipality's Water for Monterrey initiative and prioritized for selection because the sites have adequate space for panel installation and local parent groups

at the schools committed to participating, as needed, to protect and use the hydropanels once installed.

The project will provide access to a safe, sustainable drinking water source for the schools, benefiting approximately 1,470 students. The hydropanel technology has been in use since 2016 and about 130 panels have been installed in various locations in Mexico. The project will be implemented on a pilot basis to evaluate the viability and performance of the panels as a drinking water supply system for areas with similar conditions or remote areas where access is difficult. The financing agreement will include covenants requiring reporting on water generation and other performance indicators for the project.

EXECUTIVE SUMMARY

ALTERNATIVE DRINKING WATER SUPPLY FOR FIVE SCHOOLS IN MONTERREY, NUEVO LEON

Project Summary

Project Name:	Alternative Drinking Water Supply for Five Schools in Monterrey, Nuevo Leon
Project Type (Sector):	Drinking water
Objective:	Provide access to safe drinking water for students at five schools in economically distressed neighborhoods that do not have reliable water service from the existing water distribution system due to drought conditions and insufficient water supply, resulting in low pressure conditions, rationing and/or frequent service interruptions.
Expected Outcomes:	▪ Improve access to a reliable and sustainable drinking water source for 1,470 school-aged children and adolescents. ▪ Increase drinking water supply from an alternative source by approximately 600 liters (160 gallons) per day. ▪ Eliminate school closures due to lack of drinking water supply.
Population to Benefit:	1,470 students.
Sponsor:	Municipality of Monterrey, through its Department of Sustainable Urban Development
Project Cost:	US$550,000.

Financial Summary

Program:	Community Assistance Program (CAP).
Grant Amount:	US$500,000
Percentage of Project Cost:	90.0%
Recipient:	Municipality of Monterrey
Other Funding Sources	US$50,000 from the Municipality of Monterrey.

CERTIFICATION AND FINANCING PROPOSAL

ALTERNATIVE DRINKING WATER SUPPLY FOR FIVE SCHOOLS IN MONTERREY, NUEVO LEON

1. PROJECT OVERVIEW AND EXPECTED OUTCOMES

The proposed project will provide an alternative drinking water source generated by an innovative hydropanel technology to be installed at five schools in the Municipality of Monterrey, Nuevo Leon (the "Project"). The Project sponsor is the Municipality of Monterrey through its Department of Sustainable Urban Development (SEDUSO). The purpose of the Project is to provide access to safe, sustainable drinking water for children at five schools in economically distressed areas of the municipality that have experienced water outages, rationing and low water pressure due to prolonged drought. The Project is expected to provide a reliable supply of drinking water for the schools, eliminating school closures due to water shortages and contributing to a healthy learning environment for students. Approximately 1,470 students at five schools in Monterrey are expected to benefit from the 600 liters per day (l/d) or 160 gallons per day (gpd) supplied as a result of the Project.

The Project will be implemented on a pilot basis to evaluate the viability and performance of the panels as a drinking water supply system for areas with similar conditions or remote areas without easy access. Reports on water generation and other performance indicators will be required under the financing agreements for the Project.

2. ELIGIBILITY

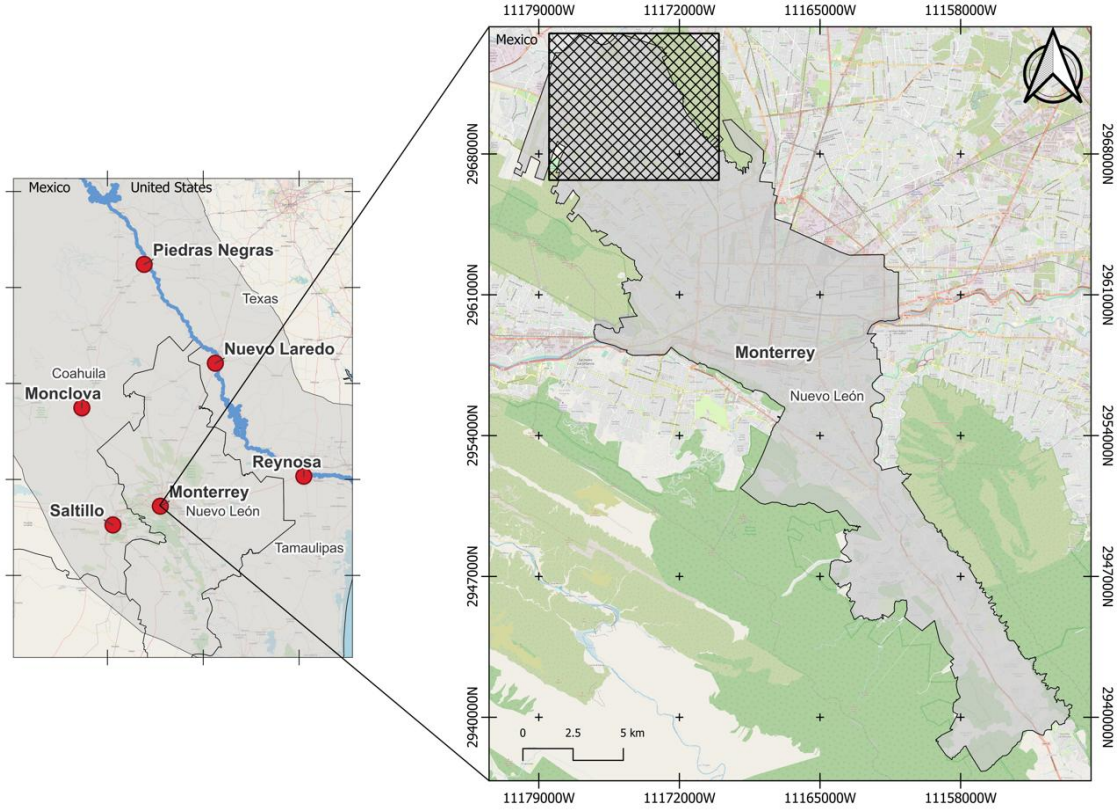
2.1. Project Type

The Project falls within the eligible sector of drinking water.

2.2. Project Location

Hydropanels will be installed at five separate schools in the northern area of the city of Monterrey, Nuevo Léon. The schools are located in the Alianza, Barrio de la Industria, Unidad Modelo, and Valle de Santa Lucía subdivisions. The proposed Project sites are approximately 95 miles (150 km) south of the U.S.-Mexico border. Figure 1 shows the location of the city of Monterrey in the state of Nuevo Leon and relative to the border. The schools are all located within the square grille superimposed on the upper left-hand corner of the map.

Figure 1
PROJECT LOCATION MAP



2.3. Project Sponsor and Legal Authority

The Project sponsor is the Municipality of Monterrey through its Department of Sustainable Urban Development (SEDUSO or the "Sponsor"). SEDUSO is a division of the government of Monterrey, tasked with "guaranteeing the sustainability of the environment, providing social welfare and improving the quality of life of all Monterrey residents." The Municipality issued an official letter to SEDUSO authorizing it to proceed with the Project.

3. CERTIFICATION CRITERIA

3.1. Technical Criteria

3.1.1. General Community Profile

According to 2020 census data from Mexican institute of statistics, INEGI, the metropolitan area of Monterrey has a population of 5,341,171, making it the second largest urban area in Mexico.[1] Approximately 25% of the city's population lives below the poverty level.[2] The Project will be implemented at five schools serving economically distressed populations.

The Project is expected to benefit an estimated 1,470 students enrolled in the five schools, along with the respective school personnel, in areas identified as having limited access to basic services such as education, health services and decent housing in the 2022 Poverty and Evaluation Report for Nuevo Leon.[3] The drinking water generated at the schools may also be offered to families in the surrounding neighborhoods during school vacations or other non-school days, providing adding another important social benefit.

Water and wastewater services in Monterrey are provided by the local utility, Servicios de Agua y Drenaje de Monterrey (SADM). However, the hydropanels to be installed under the Project will be owned and operated by SEDUSO. SADM will not participate in the Project.

Local Water System

SADM has been responsible for the water system in Monterrey since its creation in 1956. Water supply issues are a chronic problem for the municipality, due to its location in a drought-prone area coupled with the rapid growth of the city. Since the 1950s, there have been several decades of double-digit population growth, as well as several periods of drought. Currently, SADM provides services to more than 5.3 million people.

Due to water shortages in the early 1980s, investments were made to improve water security, including the construction of the Cerro Prieto Dam for water storage. In 1994, the much larger El Cuchillo Dam was completed, and currently accounts for about 75% of the system's storage capacity. SADM also relies on the local Monterrey aquifer, which is being pumped at an unsustainable rate. Even with multiple supply sources, SADM does not have an adequate water supply to provide reliable and sustainable service throughout the Municipality.

In the summer of 2022, as a result of severe drought over multiple years, reservoirs were at approximately 12% capacity, causing SADM to resort to water rationing as an emergency measure. During that year, SADM was able to supply water for only six hours daily from 4:00 to 10:00 a.m. The water shortages are ongoing and, in many subdivisions, residents report

[1] Source: https://www.inegi.org.mx/contenidos/productos/prod_serv/contenidos/espanol/bvinegi/productos/nueva_estruc/702825197926.pdf
[2] Source: Consejo Nacional para la Evaluación de la Política de Desarrollo Social [National Council for the Evaluation of Social Development Policy] (CONEVAL).
[3] CONEVAL, *Informe de Pobreza y Evaluation 2022, Nuevo León* [2022 Poverty and Evaluation Report, Nuevo Leon].

receiving water only three hours a day and at very low pressure. Hauled water has become essential to meet daily needs, and residents who can afford it have purchased on-site private storage tanks. However, for many schools hauled water has not been an option for various reasons, including the cost of transporting and storing water, difficulties in accessing school sites and security issues for the water haulers.

Due to the lack of water, many local schools have closed or modified their schedules, negatively impacting access to education. The schools selected for this Project were closed from February to September 2022. Since the emergency water shortages in Monterrey cannot be resolved in the short term, innovative methods such as this Project are required to provide water to meet current needs, especially for these more vulnerable populations.

3.1.2. Project Scope

The Project will provide a new drinking water source at the schools participating in the program. The water harvesting system will consist of up to 108 hydropanels, plumbing, and dispensers at the selected schools. The panels will be installed in vacant areas on school property. The contract will include training for school maintenance and SEDUSO staff in maintaining the system and preparing quarterly reports to document performance information, such as water production, solar power, and relative humidity for the first five years of operation. Thereafter, the Sponsor will provide an annual performance report during the remaining life of the Project. The names of the schools, number of students and the proposed distribution of hydropanels are presented in Table 2.

Table 2
SCHOOLS RECEIVING HYDROPANELS*

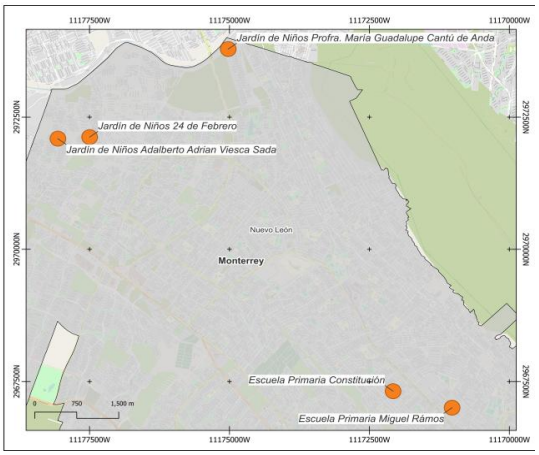
School	Number of Students	Number of Panels
Professor María Guadalupe Cantú de Anda Kindergarten	40	10
Adalberto Adrian Viesca Sada Preschool	142	20
Constitución Elementary School	550	28
Miguel Ramos Elementary School	550	30
24 de Febrero Preschool	190	20
Total	**1,472**	**108**

* If on-site conditions at any school are identified during installation that could affect the performance of the hydropanels, another nearby school may be added or may substitute one of the existing schools,

The Project is intended to supplement only the drinking water needs of each school. The water generated by the hydropanels will not be used to address other water needs, such as cleaning and sanitary uses, which will have to be met by water supplied through SADM's distribution system. The panels are an innovative approach to generating potable water, and this Project is being implemented on a pilot basis to determine the feasibility of using the panels in other locations.

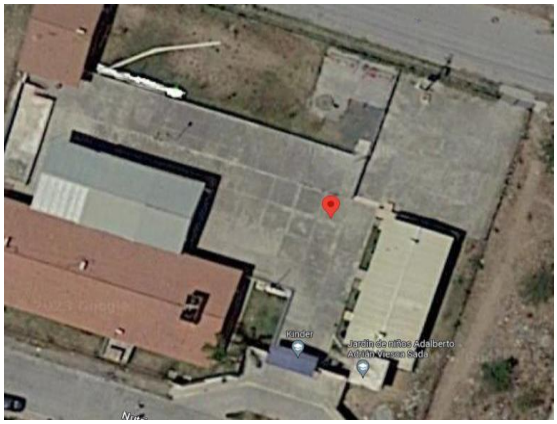
Figure 3 provides an aerial view of the layout of each school property and the space available for the panels.

Figure 3
PROJECT SITE SCHOOLS

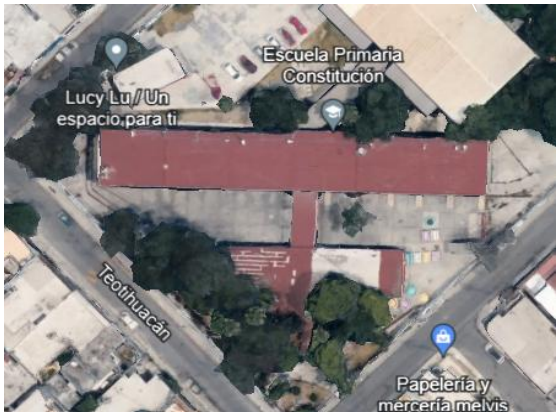


Sites of the schools to receive hydropanels

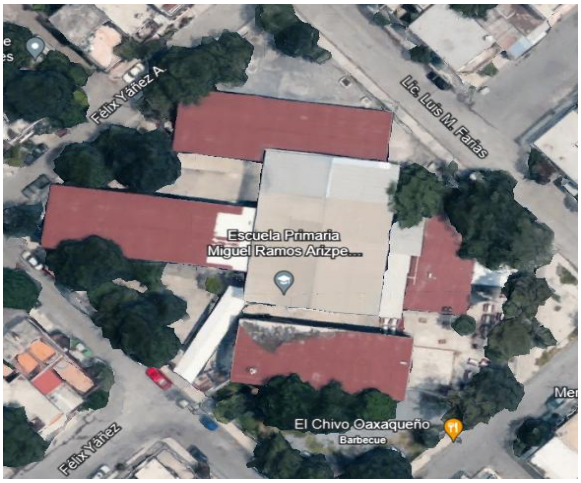
Prof Maria Guadalupe Cantu de Anda Kindergarten



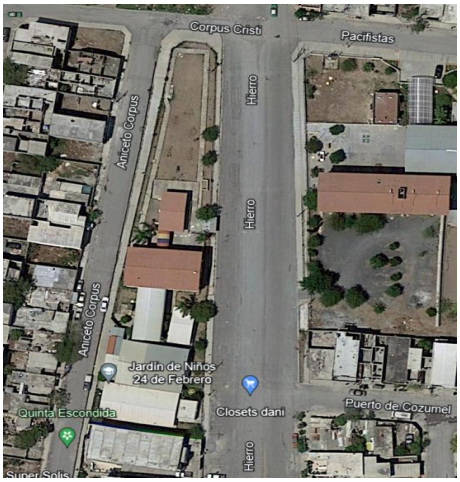
Adalberto Adrian Viesca Sada Preschool



Constitución Elementary School



Miguel Ramos Elementary School



24 de Febrero Preschool

Detailed drawings and instructions for the panel layout, anchor designs and plumbing to the schools will be provided prior to first disbursement, along with the approval from the school principal or other appropriate authority.

3.1.3. Technical Feasibility

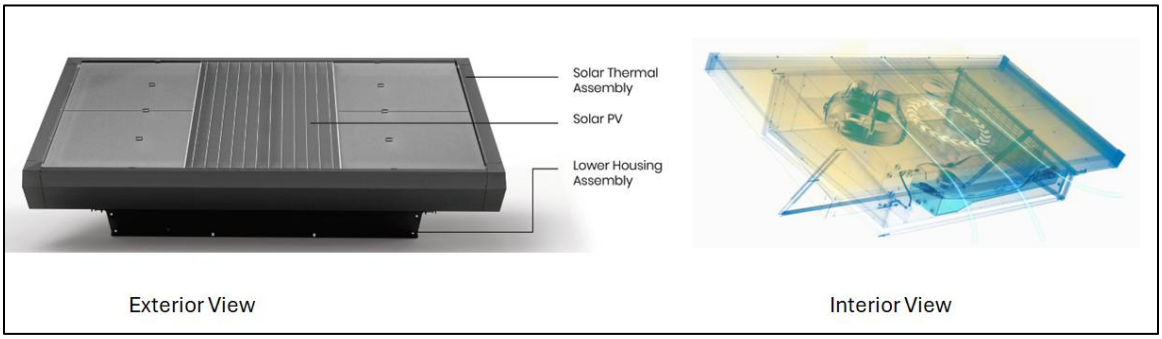
The manufacturer of the hydropanels has provided information related to how the panels function and their expected performance. The panels utilize a hygroscopic material that extracts water from ambient humidity to produce potable water. The anticipated useful life of the panels is 15 years, and the panels have the capacity to operate within a temperature range of 5 to 55^0 C (41 to 131^0 F) and humidity higher than 10%, conditions that are consistent with the Project location.

The anticipated daily production rate of the panels, based on the production rates of hydropanels in similar environments, varies from 2.5 to 8.2 liters per panel (L/panel) depending on ambient humidity, which also may coincide with the seasons of the year. For example, drinking water generation is usually lower during the months of December and January and will probably not meet the anticipated demand. However, in July and August, humidity in Monterrey is typically higher, and the water produced by the panels will meet most, if not all, the needs of the students.

The Project does not include extra water storage, but on weekends, holidays or other non-school days, area residents may be allowed to use the available water. Additionally, school staff will empty any available drinking water from the panel reservoirs into containers at the end of the school week for storage over the weekend. For extended school breaks, the panels can be adjusted to a low production mode and, if necessary, water will be automatically released through an overflow valve and discharged to the ground near the panel.

Each panel is equipped with a fan to push ambient air across the hydrophilic elements used to condense water from the air. Photovoltaic cells and batteries are included in the system to power the fan and to allow each panel to be a stand-alone unit. Individual panels include a six-liter reservoir to collect water, which is ozonated for sterilization and mineralized with magnesium and calcium ions to improve its taste and fitness for human consumption. Water will be pumped from each panel to the distribution systems in the schools, allowing students to access water from a fountain or dispenser. Figure 4 shows the hydropanel, along with its interior schematic.

Figure 4
HYDROPANEL SCHEMATIC



All the Project sites were assessed to confirm the number of panels and the feasibility of their installation. Although the panels were originally expected to be installed on the rooftop of at least two of the schools, due to existing conditions, all of the panels will have to be installed on the ground. Additionally, if on-site conditions, such as shading from vegetation or structures, changes prior to installation, part or all of the system for that school may be moved to another school within the same area.

Since the panels will be producing water for human consumption, the water needs to meet Mexican regulatory standard NOM-127-SSA1-2021, which establishes the water quality requirements for human consumption. The Nuevo Leon Health Department is responsible for ensuring that the water produced meets the standards established by the Federal Commission for Protection against Health Risks (COFEPRIS). SEDUSO is responsible for reporting the quality of the water generated by the hydropanels and signed an agreement with the Nuevo Leon Office of Health Regulation and Advancement to gather samples and perform water quality testing.

3.1.4. Land Acquisition and Right-of-Way Requirements

No land or rights of way need to be acquired for the Project. The panels will be installed on the property of the schools, which are owned by the state of Nuevo Leon. An agreement between Monterrey and the State of Nuevo Leon has been executed authorizing the installation of the panels on school property.[4]

3.1.5. Project Milestones

Once the Project is approved and the grant agreement is executed, SEDUSO will give the vendor notice to proceed. The Project is expected to take six months to complete. Approximately four months will be required to deliver the panels. Installation and start-up will be completed within two months of initiating construction.

[4] *Convenio general de colaboración entre la SEP de Nuevo León y la Unidad de Integración Educativa de Nuevo León, junto con el Municipio de Monterrey* [General Cooperative Agreement between the Nuevo Leon Department of Public Education (SEP) and the Nuevo Leon Educational Integration Unit, along with the Municipality of Monterrey].

Table 3
PROJECT MILESTONES

Key Milestone	Timetable
Contracting/delivery	4 months
Panel installation and start-up	2 months

3.1.6. Management and Operation

The Municipality of Monterrey will own the hydropanel systems and will be responsible for their administration, operation and maintenance.[5] The panels will be manufactured and installed by SOURCE Global PBC, through its Mexican subsidiary, SOURCE Global Water Technology Mexico, S. de R.L. de C.V.

SEDUSO has assigned four staff members to oversee the Project and be responsible for its operation and maintenance (O&M). Due to the innovative nature of this Project, SEDUSO does not have operational experience with this system; however, the contract with SOURCE Global includes an O&M manual and training for SEDUSO technicians and school maintenance staff. The recommended O&M activities consist of cleaning the solar panels and replacing the mineral cartridges and air and water filters annually. The manufacturer will provide the replacement cartridges and filters for a period of 15 years, already included in the Project cost.

The panels are equipped with sensors that can be used to monitor basic production and operational data remotely. The data collected from the hydropanels and commercial reservoirs includes water production, water level in reservoir/tank, PV power, ambient relative humidity, internal temperatures, fan speed, pump operation, ozonation or chlorination operation, dispenser metrics and operation. Production is optimized in the following ways:

- If an operational problem or potential problem is detected based on the data collected remotely (or a system failure notification), a service ticket is created in the manufacturer's system, and the problem will be resolved by the Network Operations Center (NOC) by issuing remote commands to the hydropanel or commercial reservoir. If the problem cannot be resolved remotely, a field technician is dispatched to the site to resolve the issue.
- The NOC also proactively issues periodic remote commands to update hydropanel / commercial reservoir firmware to fix firmware bugs and implement new features and improvements.

The ability to provide reports and issue remote commands will depend on good signal connectivity at each installation site.

[5] Source: Letter of Intent to acquire hydropanels for the pilot project to supply renewable drinking water to Monterrey schools and address water scarcity, Government de Monterrey, March 27, 2023.

The contract also includes a five-year warranty to repair or replace any panel that malfunctions due to defects related to design, materials or workmanship.

The Sponsor plans to implement security measures to protect the new hydropanel systems from theft, vandalism and/or tampering. Since the selected schools have well-defined perimeters, access to the sites will be controlled. The Sponsor also agreed to take extra precautions, such as installing barriers to protect the panels, increasing school security by installing cameras and creating a parent committee to monitor the systems.

3.2. Environmental Criteria

3.2.1. Environmental and Health Effects/Impacts

A. Existing Conditions

Persistent drought conditions, which began in 2015, have left SADM unable to provide reliable water services. SADM began water rationing in 2022 by limiting service to only a few hours a day. Table 4 below illustrates the critical status of the water supply in SADM's reservoirs.

Table 4
STORAGE IN SADM RESERVOIRS

Reservoir	Capacity (Thousand m^3)	% Full	Storage (Thousand m^3)
Cerro Prieto	300.0	48.13	144.40
El Cuchillo	1,123.0	3.53	39.60
La Boca	39.5	9.78	3.86
Total	**1,462.5**	**12.90**	**188.00**

Sources: https://cnnespanol.cnn.com/2022/06/10/sequia-mexico-monterrey-escasez-agua-orix/
https://www.jornada.com.mx/notas/2023/09/08/estados/anuncian-en-nl-cortes-de-agua-afecta-la-sequia-a-170-colonias/

Due to the lack of surface water, SADM has resorted to pumping more water from the local aquifer, which was already over-pumped, and the current withdrawal rate is not sustainable. SADM needs to secure and develop new sustainable water sources, but this process will take years to complete.

Considering that Monterrey is one of the fastest growing metro areas in Mexico and is located in an area vulnerable to drought conditions, SADM is developing a multifaceted approach for the sustainable management of its water resources. Potential improvements include rehabilitating infrastructure; conserving, reusing and importing water; and desalination projects.

Since the water supply issues in Monterrey are unlikely to be resolved soon, other approaches such as the proposed Project are needed to provide water in the immediate future for vulnerable populations. The selected schools are in economically distressed neighborhoods

and serve low-income families. The neighborhoods around the schools have been especially hard hit by SADM's water outages. Many of the subdivisions have gone without water service for days at a time and, even when service is available, water pressure has been reportedly very low. Monterrey residents have resorted to using hauled water, which is expensive and is only adequate for household uses, not human consumption. Due to the lack of water, many local schools have closed or modified their schedules, negatively impacting access to education.

Although health statistics specific to the neighborhoods receiving the panels are not readily available, there are several health issues associated with water scarcity. The most immediate issues are hygiene and dehydration. Without water, basic hygiene such as hand washing and bathing becomes nearly impossible, increasing the risks of disease transmission including COVID, influenza, diarrhea and hepatitis.[6]

Dehydration can have both immediate and long-term health impacts. Some immediate impacts of dehydration include fatigue, dizziness, seizures, confusion, diarrhea and extreme thirst. Chronic dehydration can result in kidney damage and kidney stones.[7] Given the vital need for drinking water, implementing a permanent solution for access to water during the school day is essential.

B. Project Impacts

The Project will help address issues related to chronic water shortages that are disproportionately impacting residents in low-income areas of Monterrey.

Specifically, the Project is expected to generate environmental and human health benefits related to the following Project outcomes:

- Improve access to reliable and sustainable drinking water for 1,470 school-aged children and adolescents.
- Increase drinking water supply from an alternative source by approximately 600 l/d or 160 gpd.
- Eliminate school closures due to lack of drinking water.

C. Transboundary Impacts

No negative transboundary impacts are expected from the proposed Project. The Project is located approximately 150 kilometers (95 miles) from the U.S.-Mexico border.

[6] Source: U.S. Center for Disease Control and Prevention (CDC), https://www.cdc.gov/hygiene/about/index.html
[7] Source: Mayo Clinic, https://www.mayoclinic.org/diseases-conditions/dehydration/symptoms-causes/syc-20354086

3.2.2. Compliance with Applicable Environmental Laws and Regulations

Since the water produced by the panels is intended for human consumption, it will have to meet the quality standards for drinking water set forth under NOM-127-SSA1-1994, which establishes permissible limits for contaminants, testing procedures and reporting requirements. Hydropanels are already in use at other locations in Mexico, and the manufacturer has provided documentation from laboratory tests to demonstrate that the water produced by the panels will meet Mexican regulatory standards for potability.

Water quality testing is not among SEDUSO's normal responsibilities; therefore, testing will be conducted by the Nuevo Leon Office of Health Regulation and Advancement. Any water quality non-conformance will be addressed by the manufacturer or their local field technician; however, the manufacturer has reported that water quality has consistently met applicable standards when the required mineral cartridges have been replaced on an annual basis. The terms and conditions for the grant agreement will include covenants for reporting water quality, a description of the cause of any water quality concerns, and the remedy implemented for any incidents of non-compliance.

A. Environmental Clearance

No adverse environmental impacts are anticipated, and no environmental clearance process is required.

B. Mitigation Measures

Project implementation will have no significant adverse impacts on the environment. The Sponsor and hydropanel manufacturer will install the systems using best management practices and will ensure that the panel system sites are secure.

C. Pending Environmental Tasks and Authorizations

No environmental authorizations or tasks are pending.

3.3. Financial Criteria

The total estimated cost of the Project is US$550,000. SEDUSO has requested a US$500,000 grant from NADBank though its Community Assistance Program (CAP) to support the implementation of the Project. Table 2 provides a breakdown of Project costs and proposed sources of funding.

Table 5
PROJECT INVESTMENT & FINANCING PLAN
(USD)

Uses		Amount	%
Hydropanels, mounts, storage tanks, piping and dispensers		$ 291,500	53.0
Delivery and installation of the systems		150,155	27.3
15-year maintenance consumables*		53,105	9.7
Value-added tax and fees		55,240	10.0
TOTAL		**$ 550,000**	**100.0**
Sources	**Instrument**	**Amount**	**%**
NADBank CAP	Grant	$ 500,000	90.0
SEDUSO	Equity	50,000	10.0
TOTAL		**$ 550,000**	**100.0**

*Consumables include air filters, water filters and mineral cartridges to be supplied annually over the 15-year period.

The proposed Project complies with all CAP criteria.[8] It is located within the U.S.-Mexico border region served by NADBank, is being sponsored by a public-sector entity and is in an environmental sector eligible for NADBank financing. Additionally, as a drinking water project, it is considered a priority under the CAP program. To comply with CAP program requirements, SEDUSO will fund 10.0% of the total cost of the Project.

The traditional means of providing access to drinking water is not physically or economically feasible at this time nor is it expected to become feasible in the short- to medium-term. The CAP grant will facilitate the availability of an alternative drinking water source in an area where water shortages have caused extended periods of water rationing and intermittent service. In this case, the CAP grant will support a small investment in the development of an innovative solution on a pilot basis and will require reporting to better understand the potential use of this technology to address similar conditions throughout the border region.

Finally, since there are no permits or authorizations required for the hydropanels, Monterrey is ready to procure the systems once funding has been approved.

[8] The Sponsor applied for CAP funding and the Project was developed under the previous program guidelines dated April 2020.

4. PUBLIC ACCESS TO INFORMATION

4.1 Public Consultation

On May 8, 2024, NADBank published the draft certification and financing proposal for a 14-day public comment period. The following Project documentation was available upon request:

- Agreement between the Nuevo Leon Department of Education and the Municipality of Monterrey dated August 15, 2023, giving the Municipality access to the school grounds for the installation of the hydropanels *(Convenio general de colaboración entre la SEP de Nuevo León y la Unidad de Integración Educativa de Nuevo León, junto con el Municipio de Monterrey*)
- Letter of commitment issued by SEDUSO to collaborate with the Nuevo Leon Office of Health Regulation and Advancement to test the quality of the water produced by the panels.
- SOURCE Global Hydropanel technical specifications.

The 14-day public comment period ended on May 21, 2024. The Bank received several comments in support of the Project, mainly from parents and school staff, stressing the need for the Project and expressing their gratitude.

4.2 Outreach Activities

In addition to this Project, the Municipality provided rainwater collection systems for 16 schools severely impacted by water outages through its "Escuelas de Lluvias" [Rainwater Schools] initiative. Schools selected for this Project had sites with adequate space for panel installation and local parent groups at the schools committed to participating, as needed, to secure and use the hydropanels once installed. The Municipality applied to NADBank for CAP funding after selecting the schools.

NADBank conducted a media search to gauge public awareness of the hydropanel Project for the schools and did not find any articles. However, there are several articles describing the severity of the drought, efforts to secure new water sources and the existing conditions that support the need for the Project.

- *Expreso.press* (October 30, 2023) – "*Insiste N León en acueducto y desalinizadora*" [Nuevo Leon pushing for aqueduct and desalinization plant]. Report on plans by the State of Nuevo Leon to construct a desalination plant in Matamoros and aqueduct to supply water to Monterrey.
  https://expreso.press/2023/10/30/insiste-n-leon-en-acueducto-y-desalinizadora/

- *El Horizonte* (September 5, 2023) – *La buena vecindad; punto de inflexion* [The Good Neighborhood; A Turning Point]. An opinion piece that discussed water as one of the three most significant issues facing the border region.

https://www.elhorizonte.mx/opinion/la-buena-vecindad/2635841267

- *El Mañana* (June 7, 2023) – "*Buscará NL reutilizar agua tratada en 2025"* [Nuevo Leon is looking at reusing treated water in 2025]. An article discussing a potential water reuse project in Monterrey. https://www.elmanana.com/noticias/nacional/agua-tratada-en-2025-buscara-nl-reutilizar/5718298

To date, no opposition to the Project has been identified.

5. RECOMMENDATION

Certification Criteria Compliance

The Project falls within the eligible sector of water and is located within the border region, as required under the NADBank Charter. The 14-day public comment period ended on May 21, 2024, with several comments received from parents and school staff in support of the Project. The Project review performed by the NADBank Chief Environmental Officer confirms that the Project complies with all certification requirements, and there are no pending activities required for compliance.

Funding Criteria Compliance

The Project Sponsor requested a grant from NADBank through its CAP program to complete the financing of the Project. The Project complies with all CAP eligibility criteria; therefore, NADBank proposes providing a CAP grant for up to US$500,000 to SEDUSO, in accordance with the terms and conditions proposed in Annex B.

Accordingly, based on the foregoing conclusions as supported and presented in detail in this certification and financing proposal, NADBank hereby recommends certification of the project and approval of the proposed CAP grant.