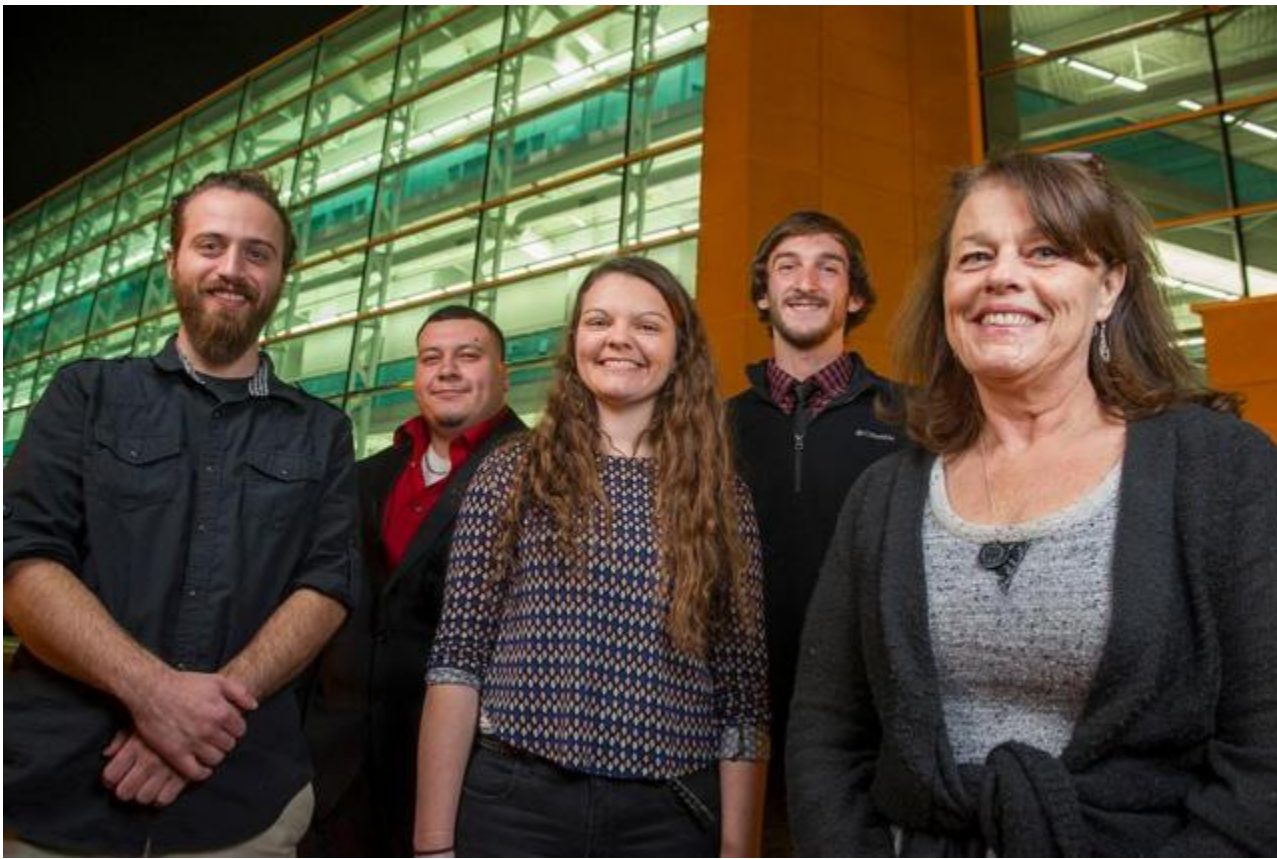


SIUE student engineers dig deep to help community in need

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EDWARDSVILLE - Southern Illinois University Edwardsville School of Engineering students are on a mission to build a sustainable water distribution system and provide access to clean drinking water in a remote Guatemalan village. Students in the University's Engineering Without Borders (EWB) organization will travel to the community of Virginia Dec. 30-Jan. 7 to assess the viability of digging a deep well to accommodate the village's needs.

“The community does not have any running water,” explained Caleb Mau, project manager and civil engineering student. “They have two small streams that run across their property. They have six wells in their community, but during the dry season, from November to May, only one of those retains water, and it’s privately owned.

“They have to walk a mile to wash their clothes, bathe and get drinking water from the small streams, which are contaminated,” Mau added.

Mustard Seed Peace Project, based in Alton, is coordinating the project with the students. Project President Terri Cranmer and professional environmental/water resources engineer Allen Oertel will accompany four SIUE EWB students on the trip.

Student participants include Mau, a native of Bonfield, Alejandro Alvarez, of Chicago, Julian Chastain, of O’Fallon, Ill. and Sarah Lepp, of Waterloo, all civil engineering majors. While in Virginia, the team will conduct extensive water testing and surveying.

“We’re going to test water from the streams, wells and any other potential water sources,” Mau said. “The hope is that with the well, since water is coming from deep underground, it won’t be contaminated, and we won’t have to treat it.”

The project will have to go through multiple stages before it comes to fruition. Future phases will involve post-assessment reports and analysis, final design approval, another trip to the village, implementation phases and project monitoring and evaluation, with a total cost of approximately \$77,000.

The key component to ensuring continued success once the project is complete is sustainability. According to Mau, EWB-USA requires that the community contribute 5-10 percent of the total cost to ensure it is committed to maintaining the system.

Along with providing a much-needed resource to the small community, the project is exposing future engineers to the important project management aspect of the industry.

“It is vitally important for students to be able to interact with practicing professionals outside of academia to get a different perspective on what awaits them after they graduate,” said Oertel. “The ability to be flexible and adaptive is one of the greatest skills they can learn, whether they go to work for the Peace Corps. or land in a corporate environment.”

SIUE EWB is raising funds for the continuation of this project. Click [here](#) to contribute.

The [SIUE School of Engineering](#) offers one of the most comprehensive and affordable engineering programs in the St. Louis region with eight undergraduate degrees, five

master's degrees and a cooperative doctoral program, all housed in a state-of-the-art facility. Students learn from expert faculty, perform cutting-edge research, and participate in intercollegiate design competitions. Companies in the metropolitan St. Louis area provide students challenging internships and co-op opportunities, which often turn into permanent employment. All undergraduate programs are accredited by their respective accreditation agencies.

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Photo: Members of the travel team, including SIUE students (L-R) Julian Chastain, Alejandro Alvarez, Sarah Lepp, Caleb Mau and Mustard Seed Peace Project President Terri Cranmer.