

Fresh water to 35,000 people Student engineers head to Kenya for pipeline project

By Tina Hilding, College of Engineering and Architecture



A group of Washington State University engineering students will head to Kenya this month, where they hope to start work to design and build a needed water pipeline for residents there.

The students, members of the WSU student chapter of Engineers Without Borders, hope to build an almost 17.5 mile pipeline to bring fresh water to residents of Kayafungo, Kenya.

Currently, in the area of Kayafungo, women have to travel an average of six miles per day to acquire fresh water, and waterborne diseases are a continual threat to residents. The students

will travel to Kayafungo with their faculty advisor, Professor **Dan Dolan**, to survey and conduct water testing in preparation for their project's design phase.



After they return from Kenya, the students, who are studying mechanical engineering and civil engineering, will begin design of the pipeline as part of their senior design project. The pipeline will be designed to provide water for 35,000 residents, accommodating future population growth for the next 30 years in the region. They are working on the project in collaboration with the non-profit group, Student Movement For Real Change.

In spring of 2008, the students' work will be reviewed by professional engineers. The group then hopes to begin construction on the first four miles of the pipeline during the summer of 2008.

"While doctors typically deal with health problems at their source, as engineers we can stop problems from ever occurring in the first place," said Alex McDonald, a senior in mechanical engineering and political science who will go on the trip. "The Kenyan water project will service

up to 35,000 people; it is public health and preventative care in a big way."

McDonald started the WSU chapter of Engineers Without Borders about two years ago. The organization does community-based, sustainable engineering projects around the world. The WSU group's initial project was the relocation design of a potable well system for a non-profit group that does work on the Yakama Indian Reservation. Engineering students also worked with the group to design two schools that will be re-built in the region destroyed by the December, 2004 tsunami in Sri Lanka.

The students who will travel to Kenya include McDonald of Woodinville, Wash.; Zakaria Mohamed of Qoryoley, Somalia; and Carrie Schramm of Selah, Wash.