

Engineers Without Borders at Arizona State University



Building a better world, one community at a time

Introduction to:

EWB-USA



Challenge:

Current world population: 6.6 billion

- 3 billion people live on less than \$2 per day
- 800 million people are chronically undernourished
- 1.3 billion people have no access to clean water
- 2.6 billion people lack access to adequate sanitation
- 1.3 billion people do not have adequate housing
- 6 million children die yearly from preventable diseases

World population in 20 years: 8 billion

- 99% of growth will occur in developing countries

Introduction to:
EWB-USA



Vision:

A world where all people have access to the **knowledge** and **resources** with which to meet their **basic human needs** in **sustainable** ways

- Water and sanitation
- Food production and processing
- Housing and construction
- Energy
- Transportation and communication
- Income generation and employment creation



Introduction to:

EWB-USA



Mission:

To link university engineering schools with communities in the developing world, with:

- Project opportunities
- Project coordination
- Project supervision
- Project documentation

To create a more equitable, sustainable world by training internationally-responsible students and engineers.

Current Projects

EWB@ASU

Tsurakú Water and Sanitation Project

Visualizing the Campus Metabolism



Tsurakú, Ecuador

- Project Objectives:
 - Improve Water Quality
 - Improve Water Supply
 - Implement Waste Management and Sanitation solutions
 - Aid the Overall Enhancement of Quality of Life for this Rural Village



GFI & Tsurakú Vision

- **GFI Vision Statement**
 - Volunteer expertise to help people around the world.
 - International Teams:
 - Escuela Politécnica Nacional de Quito (EPN-DQ)
 - UC Berkeley Group – Shuar Health Project
 - Rotary International
 - Appreciate and understand other cultures.
 - Discover the world around you.



GFI & Tsuraku Goals

EWB@ASU

- Short/Long Term Global Engagement Opportunities
 - Assessment
 - Implementation
 - Post-Assessment
- Send Students From Fulton School to Volunteer abroad



- Enhance marketing and promotion of Global Futures Initiative
 - EWB-Tsuraku Fundraising Team
- Completion of a Sustainable Project through collaboration and application of course work.
 - Engineering (Dam, Water Distribution, Waste)
 - Community Involvement
 - Economic Evaluation

