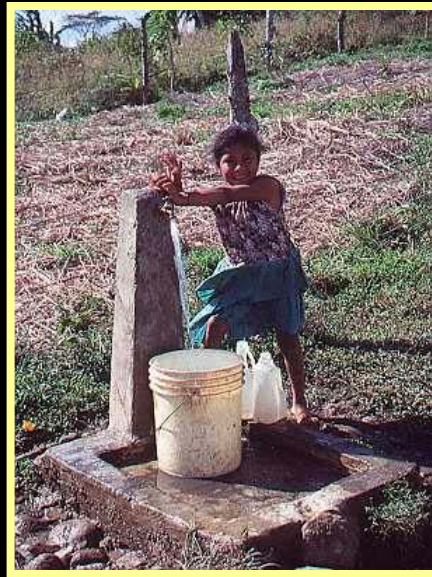


Agua Para La Vida



Helping small communities build
their own water systems since 1987

A g u a P a r a L a V i d a

A Problem Worldwide...



WHO estimates that one billion people in the world lack access to safe drinking water.

2.2 million people die every year from diarrhea, mostly children under 5.



A g u a P a r a L a V i d a

... and in Nicaragua

50% of rural Nicaraguans do not have access to clean drinking water



A g u a P a r a L a V i d a

The burden of carrying water

Women and children bear the burden of carrying water. The water often comes from a nearby river or open well and is heavily contaminated



A g u a P a r a L a V i d a

APLV Program

- Drinking water
- Sanitation
- Community health education
- Watershed conservation
- Training



A g u a P a r a L a V i d a

Project start

A project begins when a community asks for APLV's assistance. We then meet with the community to assess the need and the ability of the community to organize and complete the project



A g u a P a r a L a V i d a

Finding a spring

The spring must have sufficient water flow in the dry season and be high enough above the community to allow a feasible gravity flow design



A g u a P a r a L a V i d a

Water quality

Spring water is tested for fecal coliform bacteria at the beginning of a project as well as on a regular basis once the project is complete.



A g u a P a r a L a V i d a

Spring catchment

The spring is protected with a concrete cover to protect contaminated surface water from entering the water system. Water entering the system from below will be clean,



The trench

The trench from the spring to the community is a major piece of the work. The trench is 80cm deep and can be as long as 8 kilometers!



Every family contributes equally to the work - usually about 30 days per family.

A g u a P a r a L a V i d a

The pipe

PVC pipe, which is inexpensive and readily available, is used for all of the buried pipe. It breaks down if exposed to sunlight



A maintenance committee is formed in the community, and this group is trained on maintenance as the project is built

The tank

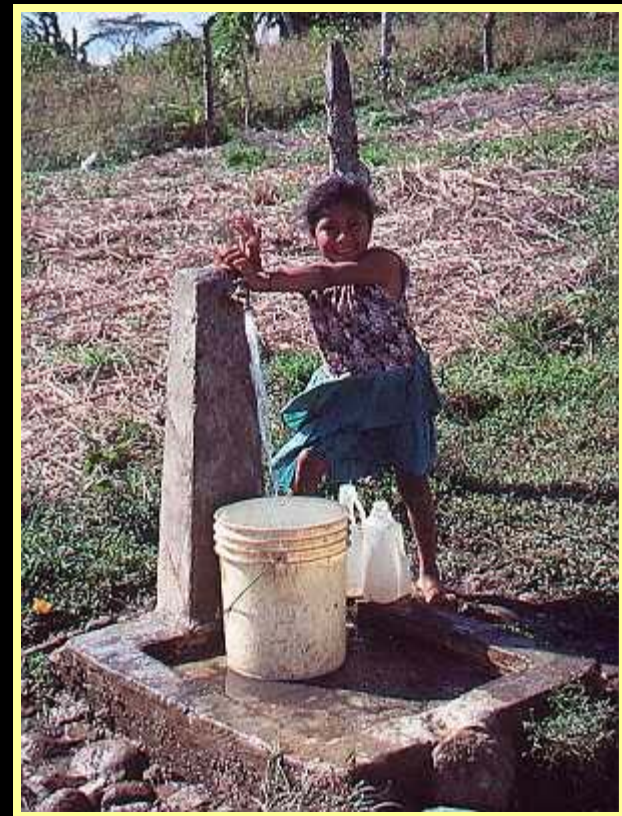
A concrete tank is built close to the community that holds enough water for about a day. The tank fills up continually from the spring and the community can use water when they need it



A g u a P a r a L a V i d a

Distribution system

From the tank, water flows through a distribution system to the tapstands, called "puestos"



A g u a P a r a L a V i d a

Clean water... Celebrate!



A g u a P a r a L a V i d a

Watershed conservation

APLV's watershed conservation program helps communities protect critical watershed terrain near their spring. This is important to maintain both water quality and water quantity.



A g u a P a r a L a V i d a

Current agricultural practice



Burning fields is the standard way to prepare them for planting

Steep terrain that has been burned is easily eroded once the heavy rains begin



A g u a P a r a L a V i d a

Deforestation



Once lush jungle has been transformed to an overgrazed landscape



Cattle ranching is the major cause of deforestation near Rio Blanco

A g u a P a r a L a V i d a

Protecting the "Cuenca"

A 2-4 hectare area around the spring is fenced in to keep grazing animals and people out.

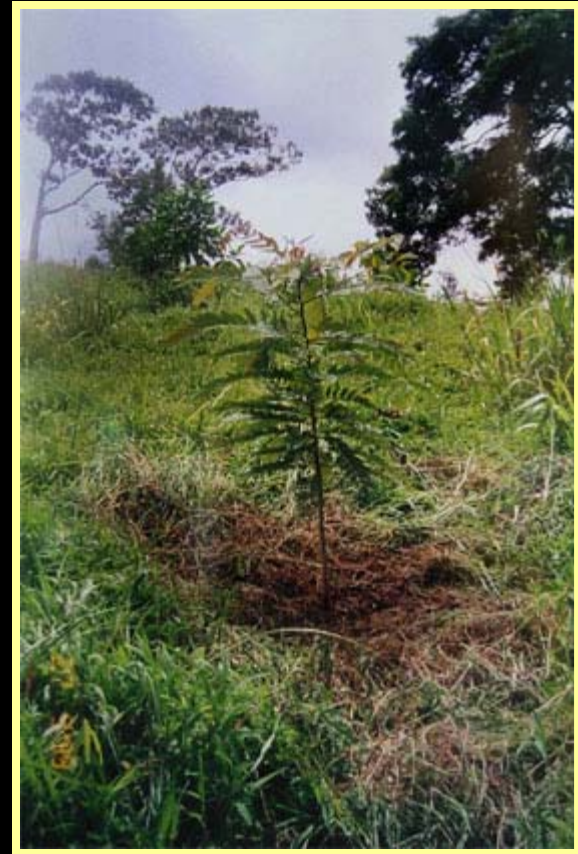


A g u a P a r a L a V i d a

Planting trees



APLV helps villages establish
tree nurseries for seedlings...



which are then
transplanted to the
protected area near
the spring

Mas Arboles... Mas Agua

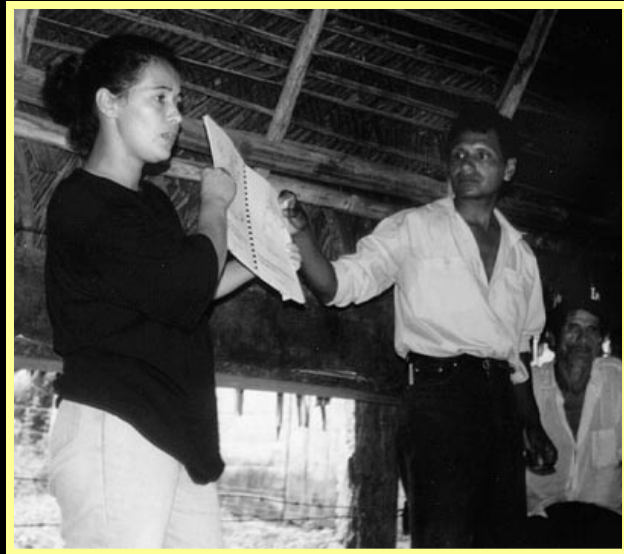
"More trees... More Water" is one of the mottos of the APLV team. Here you can see the growth that has happened within the protected area of the watershed.



A g u a P a r a L a V i d a

Community health education

Our health team works with all of the APLV communities to provide health and hygiene education



Their work includes school programs, adult programs, and house visits with each family

A g u a P a r a L a V i d a

Infant health monitoring

Children under the age of 5 are weighed regularly by their mothers on a scale that allows the mothers to mark the child's weight on a paper record the mothers keep. Weight is the single most useful indicator of infant health.



Community involvement

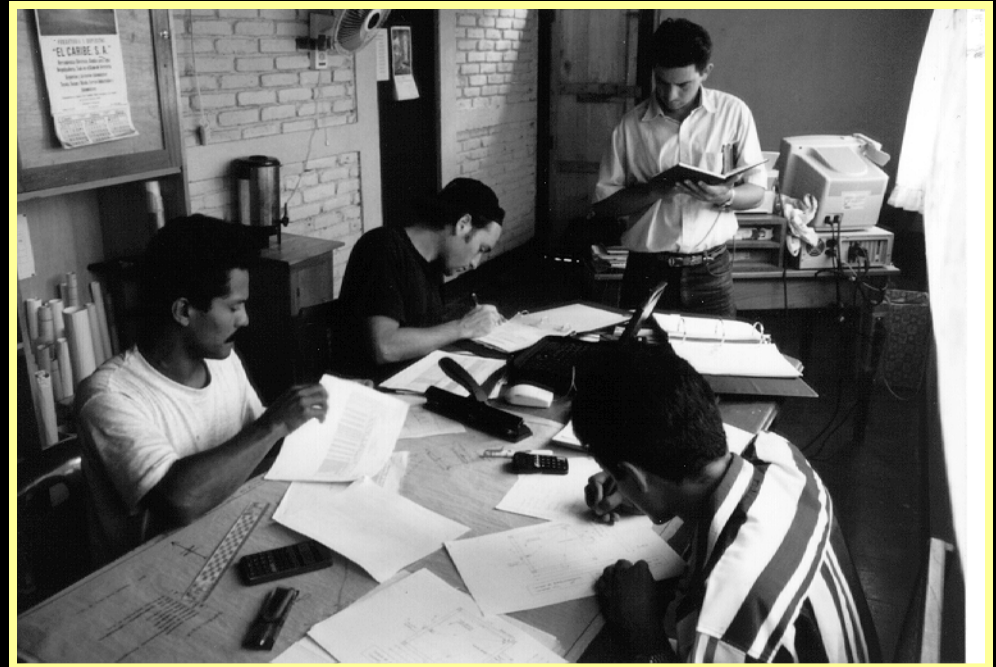
Health promoters are recruited in each community to help organize workshops and to serve as local health and hygiene resources



A g u a P a r a L a V i d a

ETAP - APLV's technical school

APLV has created a school to train local water technicians. The 2-3 year program includes classroom work and fieldwork on APLV projects.

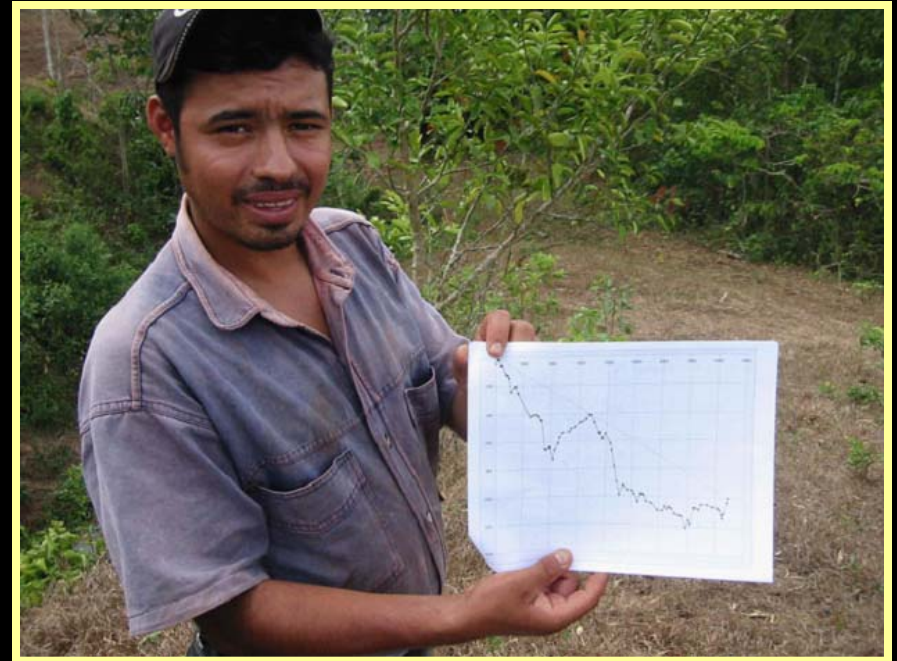


A g u a P a r a L a V i d a

Student fieldwork



Students are involved in all aspects of the design and construction of projects. Two-thirds of the curriculum is based on field work.



Graduation

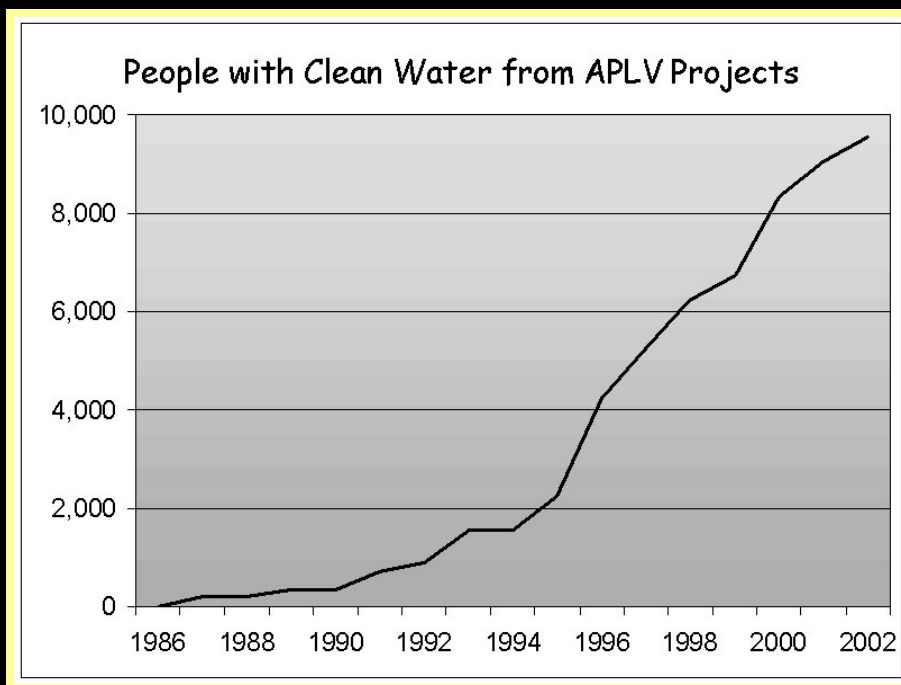
At the completion of the program, students have developed a number of useful skills, from topographical surveying to project management. Students go on to work on water projects or other design and construction projects.



A g u a P a r a L a V i d a

APLV Achievements

APLV has worked with over 30 communities to bring clean drinking water and latrines to well over 10,000 people in Nicaragua



A g u a P a r a L a V i d a