

## WATER BRIGADES PROJECT FOLLOW UP: Pajarillos

DATE OF FOLLOW UP VISIT: July 10, 2014

### System Background

- The council meets as a group every two months and with the entire community every year because there have not recently been any major issues concerning community water.
- End of year budget surplus = L35,000, and it's on a savings account at a bank.
- Households are given a three-month grace period to make their water payment, but beyond those three months a written notice is sent and the water service is cut. All occupied households are connected to the water system.
- There have been no major repairs done to the system in the past two months. Likewise, there have been no general piping issues this year.
- 120 houses connected

### Concerns Voiced by Water Council

- Last repair done on the 3" pipe due to landslide. They replaced all the PVC piping that was broken and now everything is running well.
- Plumber is satisfied with his work and salary.

### Concerns Voiced by Community

- Little to none, apart from the situation concerning the three houses at the highest point don't have water 24/7, they just have 8 hours a day.
- Community members are used to the slight chlorine flavor of their water and have no complaints about it.

### Technical Follow-up

#### Dam

- 1 hour 20 minutes walk distance from tank
- spring source

| Hardness | PH  | Chlorine | Nitrates | Nitrites | Pesticides | Lead |
|----------|-----|----------|----------|----------|------------|------|
| 25       | 6.5 | 0        | .2       | 0        | NONE       | NONE |

#### Conduction line

- Different sizing, starting at the dam at 4", and ending in the tank at 2"

#### Tank

- Two 5K storage capacity
- Chlorine levels = low to some; 1

- PH of 8.5
- Hardness of 25
- 7 ounces of chlorine allotted to entire system and fed into main tank via drip tank on top

| Hardness | PH  | Chlorine | Nitrates | Nitrites | Pesticides | Lead |
|----------|-----|----------|----------|----------|------------|------|
| 25       | 6.5 | 0        | 0.2      | 0        | NONE       | NONE |

#### House nearest main tank

| Hardness | PH  | Chlorine | Nitrates | Nitrites | Pesticides | Lead |
|----------|-----|----------|----------|----------|------------|------|
| 50       | 6.8 | 1.0      | 0.2      | 0        | NONE       | NONE |

#### Household distribution network

- Pila
- Pipe and faucet into pila

#### Recommendations and Response

- Clean dam at least 6 times a year, but should be once a month (but cannot do full cleaning during rainy season due to the increases in the flow rate of the springs)
- Definitely they have to increase the faucet's dripping rate of chlorine into the tank because the Chlorine levels tests performed in houses and at tank revealed from 0 to 1.0 ppm of presence of chlorine, and it has to be in between 2.0 and 4.0 ppm.
- Continue as they are with the service because they are having strong finances only 2.5% of the houses are delayed in payments of the service.