AE Progress Report 7.12.08

#Tamara

- #Floating Flocs
- #Training

#Future Work #Presentations #Cuatro Comunidades #Rotary Proposal #Ojojona #La 34 #Marcala

Tamara

For the last couple weeks there have been serious problems with La Chorera source and conduction line. The plant has been without water from the source several times, due to sediment clogging the intake at the source. The water returns when the Junta or people from the National Penitentiary (who also take their water from the Chorrera) go up there to clean the source.

When the Chorrera comes back after going out, it comes really dirty (150+ NTU) for about an hour.

On Tuesday, July 12 we went to the Chorera with Naaman and Ing. Serrano to see what can be done to prevent the intake from clogging and to prevent air from entering the conduction line. They recommend eliminating the current prefiltration system and catching the water in a trough cut into the top of the dam. This modification will not be that expensive. Naaman put together a budget that will be presented to the Junta. We will try to use some of \$4000 in extra Rotary grant to do this.

Floating Flocs

We also think that air is dissolved in the water coming from the Chorrera because there are pockets of air in the pipeline. We are having a lot of problems with floating flocs in the sedimentation tank. First, we thought the flocs were floating due to high alum doses. Lowering the dose seemed to get rid of the problem for a week or so. Now, even with minimal alum dose, we still have floating flocs. You can see in the sed tank that flocs are rising very rapidly, on the order of 50 cm per minute. We think this is due to dissolved air floation because of air that comes from the conduction line. In just a couple hours the surface of the sed tanks can fill with floating flocs and foam. The 2" foam removal tubes work well. A large collector on top is not really necessary. Just the 2" opening is enough if the operator pushes the foam toward the exit with a long flat stick that resembles a yardstick. There are some flocs blowing up in the near end of the first sed tank, similar to the problems Fred is having and to problems we have had in Ojojona. Alexis thinks this is a signal that the tank needs to be emptied completely. Quite a thick layer of floc accumulates on the sed lamella. When they are only 2cm apart in

Carlos now has a pretty good grasp of the first Cuadro de Monitoreo. We will now have him start filling out a second sheet every day with daily observations, sludge removal records and chemical levels.

Training

Had a 2-day training workshop Thursday and Friday July 10 and 11 for potential new operators. 4 new people came to be trained Thursday and 3 or them returned for Friday. One of those people will be replacing Karin, the current fontanero, at the end of July and the Junta is thinking of hiring another one of them to help the fontanero and Carlos. The workshop included a brief explanation of the theory behind the plant, but was mainly practical. Alexis came from Ojojona to participate in the workshop and spent Thursday night at the plant with Carlos. We suggested that the newly trained operators come for a couple hours each sometime in the next month to work alongside Carlos.

Future Work

Train Carlos to use the second data sheet every day.

Promote communication between Carlos and the fontanero who is measuring chlorine in the household connections.

Train someone from the Junta to enter the plant data into the computer.

the shallow plant will this floc layer block a significant part of the water's path?

Presentations

Presentation to mayors in Mercedes, Ocotepeque

- *About 4 mayors, one vice mayor and quite a few town council members) showed up to the presentation.
- *The mayor from Scencenti, who is also Jacobo's brother-in-law, is interested in building 2 plants, one for 500 houses in the actual municipality and another for a community of 200 houses. He said that he wouldn't have any problem finding \$50,000 to invest in a plant.
- *Jacobo said that other mayors also expressed strong interest.

Cuatro Comunidades

Will send construction budget for shallow design Monday afternoon, next he will start on Talanga budget.

Rotary proposal

*Jacobo suggests that we not put more than 2 or 3 plants in the proposal, depending on their size.

Will need to start making contacts with communities and mayors again to select 2 or 3 communities to put in the proposal.

Ojojona

Tariff was raised in an asamblea a week ago. Went up to 53.50 L for Payaguagre and 40 L for Agua Blanca.

La 34

Still would like to set up a long-term visit and training session, but are not sure when.

Marcala

Fred says IRWA currently doesn't have enough money to think about starting a circuit rider program. He is thus putting that idea on the back burner.