Student Association for International Water Issues (SAIWI)

January 2016 Trip Briefing

Destination: Ferreñafe (Lambayeque)/Shipata (Amazonas), Peru

Timeframe: January 1 – 16

Contact/affiliations: Austin Martin – Peace Corps Peru, UNR alumni; Matthew Wildhagen – Peace Corps Peru

Student volunteers: Elijah Mlawsky (graduate; trip leader), Lexi Robertson (undergraduate), Devon Eckberg (undergraduate)

Faculty adviser: Dr. Keith Dennett

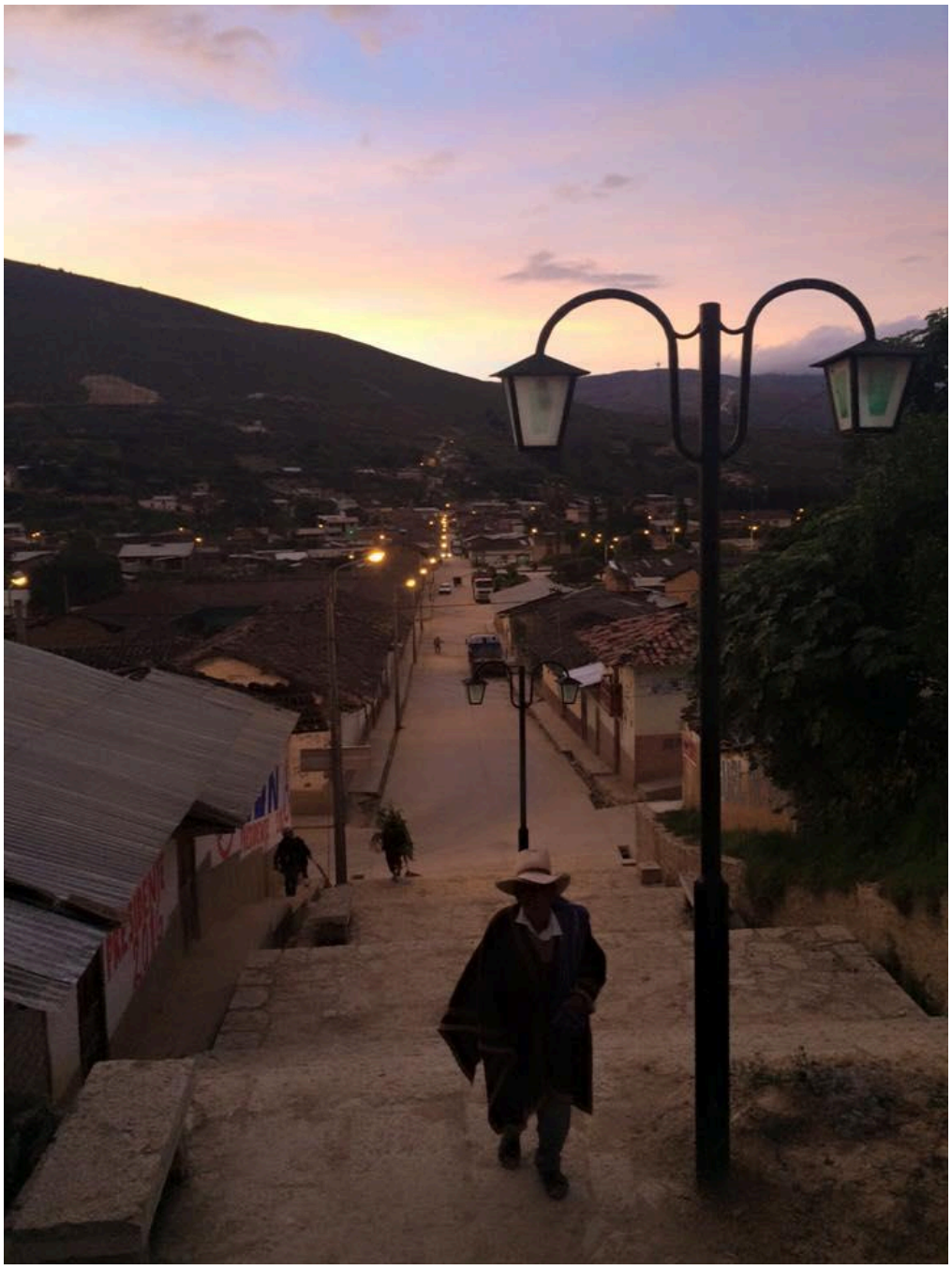
Goals accomplished: In Ferreñafe, we met with contact, Matthew Wildhagen, who is working with the local municipality on a land use assignment. He is tasked with repurposing an abandoned landfill site for community benefit. The 3-acre lot is designated to become an arbor park area. Before our arrival, the fill was lined with 6 inches of clay and 1 yard of soil, and many trees were planted. A challenge exists in efficiently watering the new vegetation; until now, this has been done by hand with buckets. After monitoring the head output of the existing well pump, we successfully designed and constructed a drip irrigation system to water all trees on site, and conserve water by limiting use to specific days.

In Shipata, we worked with UNR alum, Austin Martin, to construct a 600-liter drip chlorination system that delivers granular chlorine to the local water reservoir. After educating local operators on maintenance and residual measurement, we obtained a positive residual water sample. For the first time on record, this annex of 200 homes now has potable tap water. The mayor of the encompassing town of Luya has put up 25% of the installation cost, and has agreed to purchase chlorine for the system into the foreseeable future. We also continued Austin's bathroom construction project – his eventual goal is to fit every home in the annex with a plumbed toilet and shower, to move away from the latrine system.

All equipment for these installations was purchased on site from (grateful) community storeowners.

Budget (actual):

Flights (4 persons)	$3,315.48
Overland transport (4 persons)	$286.50
Chlorination equipment (Shipata site)	$235.80
Bathroom equipment (Shipata site)	$42.20
Irrigation equipment (Ferreñafe site)	$240.63
Total	$4,120.61
Total, equipment only	$518.63



Luya, a small village in Amazonas. Only the central village had readily potable water. With the new chlorine systems in place, the surrounding annexes, or “campos” will have potable water as well.

Setting up a 600-liter drip chlorine system to serve Shipata’s reservoir.

Installing an irrigation system to maintain a newly developing conservation park, in the harsh desert climate of Ferreñafe.

One of our wonderful host families in Luya.

Locations of Ferreñafe (orange) and Shipata (blue). Though geographically close, terrain makes for a 12-hour journey between the two. The villages are vastly different in climate and thus also in the types of water issues presented.