

**Project Status Report: CEE-2018CPST-DR-002**

**Report Date: 12 November 2018**

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**Project Title: Groundwater Modeling**

### 1) Summary of technical/non-technical challenges encountered

- The biggest technical challenge that we are currently encountered with is the need to find pertinent data regarding the groundwater in our study area. In order to find the required data, we will have to read a large technical report in Spanish, which will likely tax our current Spanish abilities and take us longer to read.
- Our graduate student lead was unavailable for meetings this week with our sponsor and faculty advisor.

### 2) Team approaches & resolutions to overcome challenges

- We planned to meet with Fidel while he was in town this week, especially to ask questions regarding the scope of our project and the types of data we should be collecting for the model.
- We will meet with our graduate student lead and catch him up on the information we received from Fidel.
- For teambuilding purposes and Spanish practice, we have decided to start watching movies in Spanish in our free time.

### 3) Status of challenge resolutions & potential project impact

- We were able to meet with our sponsor Fidel and clarify that we will be working in the greater area of Punta Cana, more specifically Higuey and Baigua. We now need to determine well locations and flowrates, recharge, hydraulic conductivity, stream networks, and observation well data.
- We also learned from our meeting with Fidel that it may be more helpful for us to convert our Modflow model into a Seawat model, which could estimate the effects of saltwater intrusion in the area, which is a local concern.

### 4) Project status & summary

- From our meeting with Fidel and our faculty advisors, we have narrowed down the scope of our project. We will be gathering data for a model in the areas of Higuey and Baigua on the eastern peninsula, with the purpose of later modeling the saltwater intrusion in the area. Sources have been provided to gather pertinent data and we will be reviewing those sources in preparation for our visit to the DR so we can request further data.