Plant Cost Calculator Task List

May 16, 2014

Our tasks associated with the calendar will be associated with our challenges:

- Find and verify reliable cost data from Honduras medium-flow treatment facilities

- Create a formula to estimate cost using existing empirics and AguaClara's population-flow rate recommendation

- Develop a front-end interface that is easy to use and provides intuitive foundation for sharing estimated cost

- Develop our cost calculator in a modular and robust way such that our interface may be inserted into any AguaClara webpage and so we can analyze future plant design costs

- Upon completion of the medium-flow calculator, begin extending our program to encompass low-flow plants and various international cost discrepancies (e.g. differences in operator wages between Honduras and India).

Our tentative calendar of tasks is as follows:

Task	Description	Target Completion	Actual Completion	Oversight
Collect and organize Honduras cost data	Use the existing Matchad sheets and discuss relevant data with Prof. Monroe. Ask questions about certain cost parameters and determine which existing data is valid and which must be revised. Assess which costs are appropriate.	2/12	–	Andy, ensuring we have necessary data to create the calculator

Develop a calculator front-end outline	Design a visual graphic on paper to outline the user interface for the front-end calculator. This will allow us to have a concrete idea of what user inputs we will use to estimate cost in our back-end formula (i.e. population, water quality, and perhaps a futuregeographic location).	2/19	−	Derek, ensure a concrete display outline has been written up.
Develop Cost formula	Have a mathematical formula using the finalized input parameters to develop a cost estimate. This formula will use our equations set into a Java or other programming file that will use modular sub-calculations and a method that accepts the initial user inputs.	2/26	−	Chris, check with AguaClara staff to ensure formula is accurate. Test formula with various inputs.
Integrate Cost formula into display	Have a basic UI that accomodates our cost formula. This should be a demo mode for Honduras only.	3/4	−	Derek, test UI with cost code.
Finalize cost calculator	Clean up our UI display and clear cost calculation with AguaClara staff.	3/11	−	Andy, collaborate with team members and AguaClara staff.
Begin India Research	Begin working to acquire India data and extend our cost calculator to other countries.	3/11	−	Chris, develop new task list and talk with Monroe regarding obtaining new data.
Report Proof Reader	Review language and formatting in written assignments.		N/A	Chris (unless rotated to another group member)

Team Coordinator	Facilitate Team Meetings, Keep track of project progress		N/A	Andy
Data Coordinator	Keep track and maintain cost data and back-end code		N/A	Chris
Structural Coordinator	Work to ensure smooth integration of project components (i.e. front-end, back-end). Review layout for cost calculators and modularity details.		N/A	Derek