

Project Status Report: CEEEn-2018CPST-004

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Project Title: Spanish Fork Irrigation-Water Conservation Study

1) Summary of technical/non-technical challenges encountered

- Preliminary student t-tests showed that the difference between averages of the same months of the two years were not statistically significant. The results will be confirmed by all members of the team. If the results are correct, the issue can be mitigated by increasing the size of the data set.
- The team will go through the lists of homes and delete outliers/inaccuracies in the data and look over if numbers match their multiplier.

2) Team approaches & resolutions to overcome challenges

- The team collected and began organizing data for two different groups between 2017 and 2018--those who had controllers installed and those who didn't. This is similar to what the team has been doing, however, this data collection will be for a larger data set (40 vs 900).
- Team will need to perform student t-tests on the larger data set and confirm equivalent results. This will include using the same sample size and data set.

3) Status of challenge resolutions & potential project impact

- The 2 control groups' figures and analysis will help the team see how the Rachio controllers are affecting water conservation at Spanish Fork.
- The team calculated different answers in solving the student t-tests. This coming week, the team members will confirm their methods with each other and perform this analysis on the larger data set that has now been created.

4) Project status & summary

- Control groups were divided into two parts, those with controllers installed during 2018 and those without in controllers in both 2017 and 2018.
- Data has been collected for both control groups to form a robust representation of how water usage changed with the installation of the controllers.