

**Project Status Report: CEE-2018CPST-010****Report Date: 11/2/2018****Team: Los Hermanos****Members: Asian Clams Report # 5**

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

Technical: Experimental problem

- Collecting, Handling and Disposing Clams - Need authorization from UT invasive Species Specialist.
- Water hydrant are connected to PI system and there are no back up systems
- Need to find out locations with highest concentrations of clams

Non-technical:

- Communication with Lehi staff (i.e. map of system)
- Biology basics about clams (i.e. how to tell whether they're alive or dead)
- Getting permission of Invasive Species with Nate Owens

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

Solutions:

- Study research provided by HA&L Engineer
- Study research provided by Dr. Miller
- Obtain historical pressure data from city of Lehi
- Create a protocol to handle clam samples and dispose of them.
- Get in contact with the UT invasive species specialist to discuss specifics about collecting, handling and disposing clams
- Study to see if clams are actually dying from chlorine treatment. Figure out a percentage rate.

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

- Unique situation as most cities have separate systems for irrigation and culinary water.
- Very Specific Days for system flushing. Will need to work around those days
- Chemicals to be injected into the system when the flow is low (i.e. during the winter)
- Historical pressure data may not be very helpful as pressure loss over time is mostly due to structural failure in the system
- Still need to get contact from Nate Owens for getting permission for research on invasive species

### 4) Project status & summary

- Looking for ways to detect high population density locations in the pipe
- Will get in contact with Nate Owens from invasive species to get authorization to bring clams into campus for testing.
- Visit Dr. Miller and talk about Lehi's condition and personal opinion of solution
- Breakfast meeting to discuss future approaches to experimentation and measurements