

### What were the outcomes of the prior phase?

1. What did I plan to do?

In the subsystem testing phase at the end of the semester, the plan was to conduct subsystem test plans and make sure everything was a 'go' for full system integration testing. I planned to conduct subsystem testing and complete subsystem test plans and conclusions.

2. What did I actually do?

I continued to maintain communication and updates with the customer and any interviewees. I cut and helped build the bucket support, as well as received guidance to establish communications with other parties to begin thinking of workshops, and how they will be implemented. I aided in the implementation of a problem-solving exercise.

What did I learn? How were plan and reality different?

I learned how to implement problem solutions in an engineering project setting, as well as how to reliably start and document the nitrogen cycle in a small testbed. I also learned how subsystems are tested and integrated into systems.

### Team level goal for next phase

#### Vision

##### **Management and Planning:**

Our team level vision for this phase is to ensure that all materials necessary for subsystem testing as well as long lead time materials for system testing are procured. In addition, we will review our detailed design, budget, schedule, and risk management with our guide and customer to ensure full transparency and acceptance of all details of the project. In summary, we will begin subsystem testing and ensure that all events are documented in preparation for system testing.

Our team vision also includes development of IP, which is currently being handled and hashed out between the project manager and the guide.

##### **Analysis:**

Dive into greater detail the use and application of various plant species to provide greater aeration for the fish. Continue to expand upon sensor research, as well as finalize and update CWA. Adhere to and update all test plans as they are completed.

##### **Prototyping:**

Expand nitrate cycling tests to include findings from aquatic plant aeration in our testing, prototype the structure for the system, and adhere to the system test plans.

##### **Summary:**

Ensure all integrated system testing is conducted to standard and documented in preparation for Imagine RIT.

**What do I plan on doing to ensure that my team has a successful review at the end of the next phase?**

1. Keep customer and guide up to date with the latest pertinent information (ongoing)
2. Perform prototyping and continue to monitor nitrogen cycle (1 hour, team, ongoing).
3. Continue constructing the structure of systems if needed so that the test plans can be performed in a timely matter (Team, ongoing).
4. Begin cycling nitrogen in the full tank (Team, ongoing).
5. Complete relevant system test plans (2-3 Hours, 25MAR2020).
6. Continue to work on deliverables (Team, ongoing).

**What is standing in my way of meeting my next phase goals?**

-Time management and delegating enough time to MSD

-Work from other classes and ROTC

**Note to teams:** Consider using an abbreviated form of this for your daily/weekly check-ins with your team and/or guide, similar to an Agile standup:

- What have I done since the last class to move the team toward its phase goals?
- What do I plan to do next to move the team toward its phase goals?
- What blockers are preventing me from getting my work done?