sddec22-10: Low Water Crossing Level Indicator
Week 7 Report
March 17 - March 21

Team Members
Dylan Blattner — *Product Owner/Sensor Lead*
Tyler Rebischke — *Team Lead/Solar Lead*
Brandon Choy — *Wireless communications lead*
Jacob Ross — *Power Storage Lead*
Nithin Sebastian — *Signage/Alerting*

Summary of Progress this Report
- Previously ordered components were picked up
- LoRa RF communication data sheets were read and compatibility with Arduino products were checked
- Ordered LoRA RF communication device
- Various other parts of the project were researched and decisions are becoming more finalized

Pending Issues
None at the moment.

Plans for Upcoming Reporting Period
- Continue ordering parts as needed
- Begin testing LoRa module and record important data such as signal strength and power draw
- Begin testing accuracy and reliability of ultrasonic sensor at detecting water level in moving and still water
- Continue to conduct research into battery and solar technologies

Individual Contributions

Team Member	Contribution	Weekly Hours	Total Hours
Dylan Blattner	- Picked up components ordered. - Continued developing testing framework for water level	3	24
Tyler Rebischke	- Read through the datasheets of several LoRa RF communication modules to see which one best suits our project. - Read through the datasheets of our Arduino boards to ensure that they are compatible with our chosen LoRa module	5	37

Brandon Choy	- Finalized and ordered the radio frequency module for the project. LoRa module with an 8km range at 868Mhz. - Searched through topography maps to locate potential low water crossings near Ames.	2	20
Jacob Ross	- Power storage rates during poor weather. - Batteries needed for the amount of energy we need to store	3	24
Nithin Sebastian	- Set up environment for coding LEDs. - Picking up parts this week	2	16

Gitlab Activity Summary

Nothing to report.