

sddec22-10: Low Water Crossing Level Indicator

Week 6 Report

March 7 - March 11

Team MembersTyler — *Team Lead/Solar lead*Brandon Choy — *Wireless communications*Jacob Ross — *Power Storage Lead*Dylan Blattner — *Product Owner/Sensor Lead*Nithin Sebastian — *Signage/Alerting***Summary of Progress this Report**

Sent in an order for initial parts needed for testing

Continued researching RF communication, with intentions to order within the next few weeks

Researched similar projects for comparison

Communicated with The Iowa Department of Transportation: Bridges and Structure Bureau for more information about low water crossing locations

Pending Issues

None at the moment

Plans for Upcoming Reporting Period

Tyler: Assist with testing of water sensor and LEDs

Jake: Assist with testing of water sensor and LEDs

Nithin: Test LEDs

Dylan: Test water sensor

Brandon: Keep researching RF communication and prepare to order a module for testing

Individual Contributions

Team Member	Contribution	Weekly Hours	Total Hours
Tyler	Researched cellular communication systems as opposed to RF communications Looked at previous projects that have been completed with cellular systems and compared their technology with what we need for our project	5	
Brandon Choy	Reached out to an employee of The Iowa Department of Transportation: Bridges and Structure Bureau to collect more information about low water crossing locations and water flow sensor information. Located potential testing spots near Ames, IA Discovered additional signage system that is in use today	3	0

	for low water crossings Researched cellular modules instead of LoRa and concluded that if the system is to be implemented in a rural area there might not be strong cellular signal which makes that technology not feasible.		
Jacob Ross	Continued research into possible power storage options for non ideal situations Research into solar panel harvesting during peak and non peak conditions	3	0
Dylan Blattner	Started planning testing framework for water sensor Sent part in for the order	3	0
Nithin Sebastian	This week I continued to research more into what frameworks I could utilize to best code the addressable LEDs I found which arduino setup would be best for our project	2	0

Gitlab Activity Summary

Nothing to report.