

Stacked Rapid Sand Filtration- Full Scale

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Stacked Rapid Sand Filters are a relatively new Aguaclara technology. Some of the advantages of this filtration system include its ease of operation and the relatively low construction and maintenance costs. More details on how the Stacked Rapid Sand Filtration works can be found on this webpage: [Stacked Rapid Sand Filtration](#)

The first full scale Stacked Rapid Sand Filtration system has recently been implemented in Tamara. Our research this semester will have a lot of focus on troubleshooting the issues that are currently arising with the filtration system in Tamara. We will be using the data from Tamara in order to come up with solutions to those problems and also provide insight for future modifications. Another aspect of our research is to find a way to develop a new low-flow filtration system, roughly less than half of the flow rate that the current filters are optimized for. This will allow us to increase the number of smaller communities that can benefit from Aguaclara technology.

Current & Future Research

Our current research focuses on developing new construction methods for the inlet and outlet manifolds of the filtration system. Later on we will also be designing, constructing, and testing a new low-flow filtration system. In addition, we will also evaluate pressurized and open filter boxes. Finally, we will investigate the possibility of designing an automated backwash control for the filtration device.

Team Members

[Chris Holmes](#)
[Stephanie Lohberg](#)
[Michelle Wang](#)
Team Documents

	Challenges	Tasks	Teach-In	Presentation
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Past Research

None.