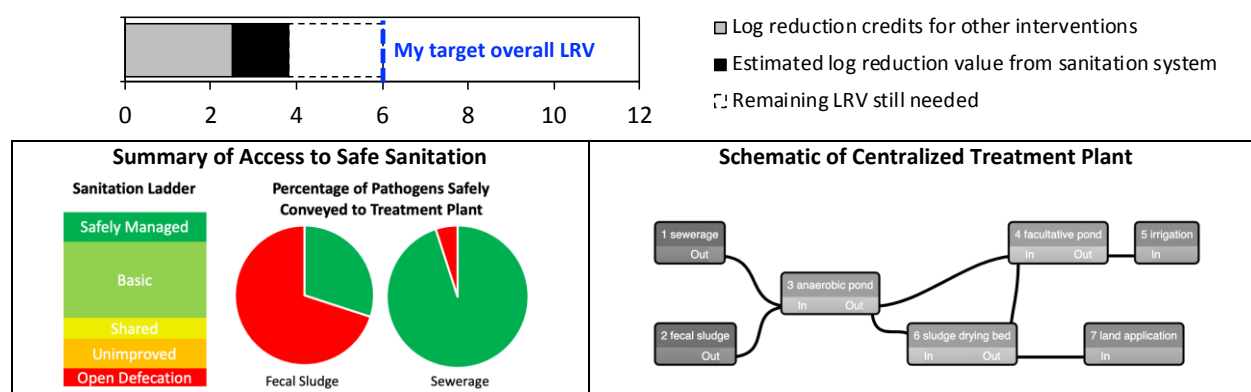


## Workshop: Knowledge to Practice with the Global Water Pathogens Project (GWPP) Demonstration of Pathogen Flow and Mapping Tools for Sanitation Decision-Making

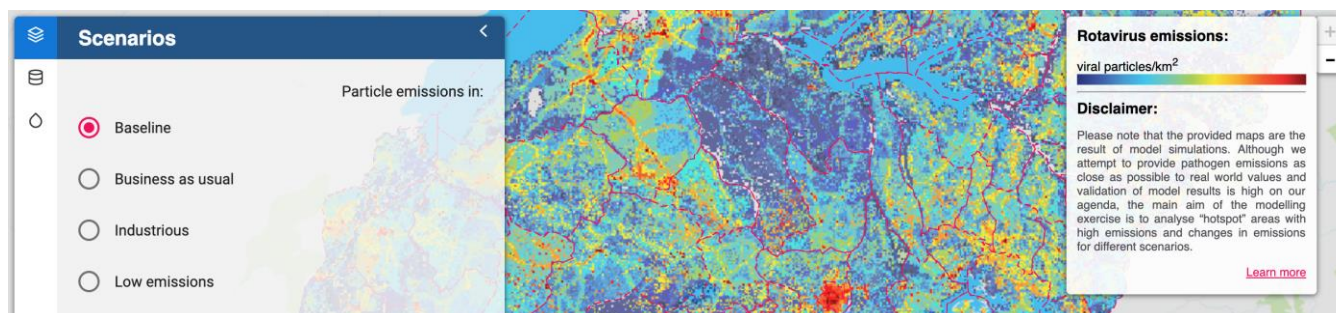
This workshop will take place on Sunday immediately following the QMRacatch workshop and before the reception. Using case examples from Uganda, we will showcase two new tools designed to aid with decision-making for sanitation and water quality programs in data-scarce areas. The workshop is open to all, and there is no cost to attend.

The **Pathogen Flow Tool** predicts the fate and transport of pathogens through the sanitation service chain, using models based on data from GWPP with inputs from users about the design and operation of the system. Users establish a target pathogen reduction value based on self-expressed health goals and a simple microbial risk assessment. Then, they collect and upload their own data or link to external data sources, sketch their current or proposed centralized treatment system, and run the model to estimate the log reduction of pathogens in the system.



**Fig. 1: Sample output from the Pathogen Flow Tool**

The **Pathogen Mapping Tool** is designed to simulate pathogen emissions to surface water and water quality in rivers as a result of sanitation coverage. The tool comprises a mapping model and a visualisation. The mapping model enables users to calculate the pathogen emissions and concentrations for their selected area using location-specific input data on population, urbanisation, sanitation coverage, treatment and hydrology, and data on pathogen persistence from GWPP. The model outputs are most relevant for studying relative differences. Areas with relatively higher emissions and concentrations (hotspots) can become priority locations for action. Scenarios can be used to assess changes in socioeconomic development and climate, or implementation of proposed sanitation solutions.



**Fig. 2: Sample output from the Pathogen Mapping Tool**

The exact program for the workshop will depend on attendance. However, it will include an interactive demonstration of the tools and breakout sessions, as appropriate, to provide more opportunities for interaction with the tools. During the full week of the symposium, conference attendees will have the opportunity to try the tools themselves and provide feedback that we will incorporate into their finalisation and implementation.