

Drinking Water Satisfaction and Levels of Service

Purpose

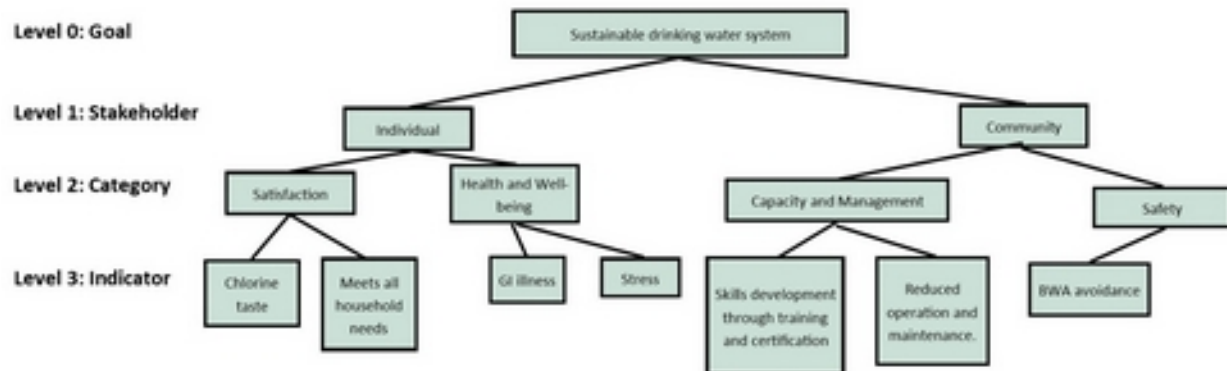
Levels of service (LOS) and lifecycle costs (LCC) drive the choices made around community drinking water systems. Often, LOS and LCC only include technical performance and economics leading to infrastructure that may lead to operational challenges, reduced satisfaction, and potentially increased long-term costs if considered more holistically. This study will gain understanding from community members and operators on what is expected and valued in drinking water treatment and service. The results will be used to create a framework that shows the priorities of community members and operators alongside financial costs. This tool can be used when evaluating alternatives for design and management of drinking water infrastructure and demonstrate to funding bodies and leadership the need for flexibility in allocating resources.

Process

This project will require engagement with operators, community leaders, and community members through surveys and interviews. The study will use:

- Interviews to scope the impacts and influence of water systems.
- Surveys for pairwise comparison to rank social priorities.
- Survey on maintenance activities for different treatment systems.
- Interviews for understanding costs and timelines of maintenance activities.

Example Hierarchy of Values for Pairwise Comparison:



Outcomes

The information will be used in an analysis of social and financial data to show lifecycle impacts. This could be used to provide:

- Support for funding systems that support community way of life.
- A decision-making matrix for evaluating design alternatives.
- Data for maintenance management plans.
- Evaluation of water treatment technologies.