

WaSH MEL Project

# Proposed Core WaSH MEL Indicators:

Monitoring for Continuous Program Quality  
Improvement



February 2014

Created for The Conrad N. Hilton Foundation



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## About The Water Institute

The Water Institute at UNC provides international academic leadership at the nexus of water, health and development.

Through **research**, we tackle knowledge gaps that impede effective action on important WaSH and health issues. We respond to the information needs of our partners, act early on emerging issues, and proactively identify knowledge gaps. By developing local initiatives and international **teaching and learning** partnerships, we deliver innovative, relevant and highly-accessible training programs that will strengthen the next generation's capacity with the knowledge and experience to solve water and sanitation challenges. By identifying or developing, synthesizing and distributing relevant and up-to-date **information** on WaSH, we support effective policy making and decision-taking that protects health and improves human development worldwide, as well as predicting and helping to prevent emerging risks. Through **networking and developing partnerships**, we bring together individuals and institutions from diverse disciplines and sectors, enabling them to work together to solve the most critical global issues in water and health.

We support WaSH sector organizations to significantly enhance the impact, sustainability and scalability of their programs.

The vision of The Water Institute at UNC is to bring together individuals and institutions from diverse disciplines and sectors and empower them to work together to solve the most critical global issues in water, sanitation, hygiene and health.

## About the Conrad N. Hilton Foundation

The Conrad N. Hilton Foundation is a family foundation established in 1944 by the man who started Hilton Hotels. The Hilton Foundation provides funds to nonprofit organizations working to improve the lives of disadvantaged and vulnerable people throughout the world. The Foundation works to improve the well-being of the ultra-poor in targeted developing countries through its Strategy for Sustainable Water Access. This strategy emphasizes interventions for expanding sustainable access to safe water, strengthening the enabling environment for WaSH interventions in target countries, and disseminating relevant sector-wide knowledge.

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## Abbreviations and Acronyms

HF	Conrad N. Hilton Foundation
M&E	Monitoring and Evaluation
MEL	Monitoring, Evaluation, and Learning
NC	North Carolina
NGO	Non-governmental Organization
TS	Technical Support
UNC	The University of North Carolina at Chapel Hill
UNICEF	The United Nations Children’s Fund
VLC	Virtual Learning Center
WaSH	Water, Sanitation, and Hygiene
WaSH MEL	The Hilton Foundation’s WaSH monitoring, evaluation, and learning project
WHO	The World Health Organization
WI	The Water Institute at UNC

## Summary

The objective of the Hilton Foundation's WaSH monitoring, evaluation, and learning project (WaSH MEL) is continuous quality improvement of Hilton-funded WaSH projects to improve project outcomes and efficiency. Quality improvement is essential for optimizing service delivery in a changing WaSH landscape, and accurate, timely information is the force that drives practical quality improvement actions. This includes information about the functionality of WaSH systems, as well as their reliability and sustainability, the ability of users to access these services, and the safety and quantity of water that users collect. In order to identify quality improvement opportunities and track program impacts across projects, countries, and the Hilton Foundation's WaSH portfolio, it is necessary to collect this information using a harmonized set of core indicators, such as those proposed in this document. Following a comment and discussion period, a core set of indicators will be finalized and piloted by partners who will then be in a position to immediately engage in quality improvement activities in partnership with the Water Institute team, fueled by the resulting data. In addition, these data will allow partners to better track the impact of their projects, and will allow the Hilton Foundation to assess the aggregate impact of WaSH programs across its portfolio.

## Introduction

The Hilton Foundation's strategy focuses on delivering sustainable safe water to users, with an emphasis on reaching the poorest of the poor. In order to maximize the impact of its WaSH program, the Hilton Foundation has sought to invest in the most effective and efficient organizations working on implementing WaSH programs, as well as on knowledge, learning, and enabling environment (KLEE) activities that promote WaSH implementation. Because the WaSH landscape is changing rapidly, and because the easiest-to-reach populations have already been served in many developing country settings, it is critical for Hilton's WaSH partners to continue to refine and improve their programs in order to continue to achieve the greatest possible impact in terms of health, social, and economic outcomes for the greatest possible number of program beneficiaries.

The WaSH MEL project seeks to support Hilton's WaSH partners in continuously improving project outcomes and efficiencies. This quality improvement process is driven by frequent, small adjustments to program targeting and implementation, based on timely and practical information about the performance and impact of WaSH projects. In order to collect this information in a way that is comparable across projects, and that allows the Hilton Foundation to track the impact and efficiency of its overall portfolio, it is useful for partners to adopt a harmonized set of core indicators for WaSH project monitoring. This framework should allow Hilton WaSH Partners to answer key questions about WaSH service delivery throughout the life of their projects.

Once partners have collected indicator data, these data will be used to launch immediate quality improvement opportunities. If data show that levels of WaSH management committee activity are low, quality improvement projects may focus on reactivating dormant committees. If monitoring shows that committees are active but unable to repair water point failures, efforts may target

retraining these committees or providing them with spare parts and tools. Finally, if data show that most water points are producing safe water, but household water quality is frequently impaired, quality improvement efforts may focus on household safe water storage and/or treatment. These examples are meant to illustrate the ways in which monitoring the right indicators can fuel immediate program quality improvement opportunities. The Water Institute team will work with Hilton Foundation partners to set such improvement projects in motion, and will also seek to facilitate cross-partner collaborations for quality improvement.

### Critical questions for WaSH programs

It is not enough to know how many Hilton-funded water points exist, or even how many are functioning at any one time. Numerous studies have shown that water quantity, water quality, the continuity of safe water access, as well as access to adequate sanitation and hygiene, all substantially affect the health, economic, and social impacts of WaSH projects. Furthermore, the Hilton Foundation has made a commitment to serving the poorest of the poor through its WaSH programs. Thus, each Hilton WaSH partner must be able to answer the questions below in order to effectively track and improve project outcomes and efficiencies.

Table 1. Critical questions for WaSH project quality improvement

Table 1. Critical questions for WaSH project quality improvement
How many users have continuous and sustainable access to enough safe drinking water right now as a result of this project?
How many residents of communities served by this project do not currently have continuous and sustainable access to enough safe drinking water, and why not?
What can we do right now to increase access in these communities?
How can we continue to improve the level of service for those who have access now?
How many project beneficiaries with access to safe water also have access to adequate sanitation and hygiene?
How effectively are we reaching the poorest of the poor?
How could we reach our target populations more effectively and equitably?

In order to answer these questions, several key analyses must be regularly performed using regularly collected information. These analyses include calculating coverage levels, water point functionality levels, water safety statistics, and other important calculations that describe the current status of WaSH service delivery in a program. These analyses should be performed across projects, countries,

and the entire Hilton WaSH portfolio using comparable data collection and analysis methods. Performance should be assessed both in terms of current values of these statistics and, where possible, changes in these values over time. Selected examples of key performance statistics are presented below:

**Table 2. Key WaSH service delivery performance statistics**

Key WaSH service delivery performance statistics	
1	% of households using an improved primary water source year-round
2	% of households using piped water year-round
3	% of households using an improved sanitation facility
4	% of households with hygiene facilities
5	% of water systems functioning
6	% of water systems meeting national standards for flow rate
7	Mean number of users per water point
8	% of water systems meeting national standards for users per water point
9	% of sanitation facilities functioning
10	Median # of service disruptions per water point per year
11	% of water systems functional 5, 10, and 20 years after implementation
12	% of water systems with no detectable <i>E. coli</i>
13	% of water systems with very high risk water ( <i>E. coli</i> > 1000 CFU/mL)
14	% of water systems meeting national standards for arsenic
15	% of households with no detectable <i>E. coli</i> in stored water or water from an in-home source, where applicable
16	% of households with very high-risk stored water ( <i>E. coli</i> > 1000 CFU/mL) or very high-risk water from an in-home source, where applicable
17	Median distance to water point (m)
18	Median volume of water collected (L/person/day)
19	% of communities with operational WASH committees
20	% of communities collecting a tariff for water

This is by no means a comprehensive list. However, it is clear that in order to calculate these statistics (or output indicators, in M&E terminology) it is essential to collect the right types of data. In some cases, such as #5 and #7, it is sufficient to measure a single variable, such as the functionality of water points (measured by direct observation at the facility level) or the number of users per water point (measured using survey methods at the WaSH committee or community level) and calculate simple ratios or averages from the resulting data. In other cases, such as #18, calculations are more complicated, requiring paired data on household size, water collection trips per household per day, and water collection container size. In order to accurately portray the current status of WaSH projects with sufficient detail to drive continuous quality improvement, it is necessary to collect a number of indicators at different levels (i.e. household, facility, and community). At the same time, it is important to limit the number of indicators used, to ensure that the task of monitoring remains manageable. Thus, a set of well-chosen indicators is needed to drive quality improvement activities. Furthermore, in order to assess performance at the country and portfolio levels, it is necessary to collect the same core indicators using harmonized methods across multiple projects. A proposed set of indicators designed to meet these criteria has been developed. These indicators can be divided into the following categories:

**Table 3. Indicator categories**

<b>Indicator category</b>	<b>Explanation</b>
<b>1. Metadata</b>	These indicators provide information about the data that have been collected and help with sorting, analyzing, and mapping the other data
<b>2. Facility characteristics</b>	Not all facilities provide equal levels of service. The type of facility, its condition, and the number of people sharing it all affect the benefits provided to users
<b>3. Functionality</b>	If the water point is not working, users cannot benefit
<b>4. Access</b>	If users cannot access the source easily, they will not be able to collect enough water to meet their needs
<b>5. Reliability</b>	If safe water is periodically unavailable, this can negate many benefits of access
<b>6. Sustainability</b>	If the water point does not continue working over time, benefits are fleeting
<b>7. Water safety</b>	If the water users consume is unsafe, benefits are greatly diminished
<b>8. Sanitation and hygiene</b>	The benefits of safe water are greatly enhanced by access to adequate sanitation and hygiene
<b>9. Equity</b>	Providing benefits to the poorest of the poor is a goal of the Hilton Foundation's sustainable safe water strategy
<b>10. Process</b>	The processes that WaSH implementers use can effect outcomes, and tracking these operations can reveal improvement opportunities

Proposed indicators of WaSH service functionality, access, reliability, sustainability, water safety, and equity are listed below. These include WaSH indicators currently used by Hilton partners such as UNICEF, WaterAid, World Vision, MWA, and others, as well as novel indicators developed by the Water Institute team in consultation with the team’s advisory group and other experts in the field. In addition, the WI team included indicators for drinking water and sanitation coverage currently used by the WHO/UNICEF Joint Monitoring Programme (JMP), or proposed by JMP working groups for use in the post-2015 development context. Finally, indicators currently used in nationally representative household surveys such as USAID’s Demographic and Health Surveys (DHS) and UNICEF’s Multiple Independent Cluster Survey (MICS) were incorporated. In some cases, these indicators were used unchanged, while in other cases they were modified to suit the needs of the Hilton Foundation’s WaSH partners.

### Collection of Indicators

Once the list of core indicators is finalized, following a period of discussion, review, and comments, partners will begin collecting indicator data at the pilot scale, eventually ramping up to full-scale implementation. Monitoring data will be collected using a WaSH MEL field manual currently in development (to be made available by November 1, 2013), which will provide standardized procedures for each aspect of data collection. In addition, partners will collect any number of other program-specific indicators that they choose to monitor. Indicators will be collected at four different levels:

**Table 4. Levels of indicator collection**

Level	Methods	Sample	Frequency	Est. time
<b>Facility</b>	Observation; survey; water quality testing	All water points; representative sample of sanitation facilities	1-2 times/year	1-1.5 hours per facility
<b>Community</b>	Survey	All project communities	1-2 times/year	1 hour per community
<b>Household</b>	Observation; survey; water quality testing	Representative sample of households	1-2 times/year	1-1.5 hours per household
<b>Project</b>	Survey	Project headquarters	1 time/year	2-4 hours/year

## Sampling

Not every indicator will be collected at every level, and most indicators will be collected at only one level. In addition, while all water points and communities in project areas should be monitored at least once per year, not all households and sanitation facilities will be visited. Instead, a representative sample of households and sanitation facilities will be selected for monitoring. Methods for selecting this sample will be described in the WaSH MEL field manual currently in development.

## Data storage and analysis

In order to rapidly analyze monitoring data to identify improvement opportunities, it will be useful to store this information in one place. The Water Institute team is currently working to develop a secure WaSH MEL database for this purpose. Partners can upload monitoring results to this database, and can view their own data at any time, or download reports with the types of key performance statistics presented in Table 2. In addition, partners may choose to store data in their own databases as well. Partners using mobile data collection technologies will be able to export indicator data to the WaSH MEL database, while partners using paper-based methods will be able to upload data manually using simple web upload forms.

Analysis of the information stored in the WaSH MEL database will reveal program quality improvement opportunities, and will also be useful to partners in reporting their progress to the Hilton Foundation. In addition, the Water Institute team will be available to work with partners on specific quality improvement projects involving in-depth analysis of monitoring data using advanced statistical methods. These “deep-dives” will be limited by time and budget constraints, and will be conducted on a case-by-case basis, in order to achieve specific partner quality improvement goals.

## Proposed Core WaSH Indicators

The proposed Core WaSH indicators are listed below. While this is a complete list of the proposed indicators, it does not include the proposed survey questions and direct observation instructions, or the response options for each indicator. A detailed table containing all of the proposed core WaSH indicators, as well as survey questions, observation instructions, and response options is available through the WaSH MEL Virtual Learning Center: [www.washmel.org](http://www.washmel.org).

### 1. Metadata

These indicators provide context for the other indicators measured by WaSH partners: they answer the “who, what, where, when?” questions for the data on WaSH service delivery. They also contribute to data validity if mobile data collection tools are being used, since location and time are automatically recorded with these tools. The introduction of a unique ID for communities and WaSH points is critical, because it allows subsequent records for the same water point or community to be

easily matched up and compared over time, and reduces the likelihood of mistakes due to different spellings of community names, etc. Thus, metadata serve to magnify the value of other indicators for quality improvement. These metadata are collected for all main survey types: facility, household, and community.

**Table 5. Metadata**

All survey types
Date the data were collected
Time the data were collected
Latitude in decimal degrees
Longitude in decimal degrees
Country in which data are collected
Organization collecting the data
Name of person collecting data
Name of community
Unique ID number of the community
Type of survey

**2. Water point and sanitation facility characteristics**

Not all WaSH facilities are created equal. Facility characteristics such as the type of water point or sanitation facility in question (borehole with hand pump or piped system; pit latrine or flush toilet), the condition of the facility, and the number of households sharing it can all influence the level of service that users receive, which in can in turn determine the benefits they derive from sustainable safe water access. Monitoring these characteristics is thus critical for identifying new ways to improve the impact and efficiency of WaSH service delivery. In addition to measuring these characteristics at the facility level through direct observation and survey questions administered to WaSH management teams, it is also important to collect basic information at the community level, such as the total number of water points in the community and the number of people living in the community. This is important because the number of other water points in a community has been shown to affect the rate at which management committees repair water point failures, while the total number of people in the community provides a useful check on the reported number of users for each system. Finally, in a limited number of households in a fraction of project communities, household-level data will be collected on the types of water points households use in the wet and dry seasons. These indicators provide information about water use patterns that cannot be easily collected at the facility or community level, such as seasonal water use patterns, and which alternate

sources users access when their primary source is unavailable. In addition, these indicators also provide a second useful check on facility-level information. Collectively, facility characteristics allow partners to identify the water point features that correlated with higher or lower levels of functionality or sustainability, and take appropriate quality improvement actions.

**Table 6a. Facility characteristics: water**

Facility	Community	Household
Type of water source	Number of people in community	primary water source type (Dry season)
Unique source ID, if available	Number of water points in community	secondary water source type (Dry season)
Date water point was built		Is primary dry-season source on-plot?
Private/public		Is primary dry-season source private?
Number of households using facility		primary water source (Wet season)
Who manages water point		secondary water source (Wet season)
Condition of facilities		Is primary wet-season water source on-plot?
Facility drainage		Is primary wet-season water source private?
Facility photo		

**Table 6b. Facility characteristics: sanitation and hygiene**

Facility	Household
Type of Sanitation Facility	Primary Sanitation Facility used
Private/public	Number of households using facility
Number of households using facility	Does the household have a location for hand hygiene?
Does the facility have hygiene supplies?	Is water available for hand hygiene?
Type of Hygiene Facility	Is soap available for hand hygiene?
Distance to Hygiene Facility	
Condition of facilities	
Facility photo	

### 3. Functionality

Functionality data tell us about whether a facility is working at the time of the site visit (direct observation) as well as whether it has failed recently (WaSH committee or community leader survey). It is important to ask about failure in the last two weeks, because studies show that recall is best within two weeks or less. In addition, it is useful to measure failure rates over the past year, because this may better capture seasonality effects that could be missed with a 2-week recall period.

**Table 7a. Functionality: water**

Facility	Household
System operational?	Failure in last two weeks?
If not operational, why?	Days out of service in last two weeks?
How long has system been non-operational?	Failure in last year?
Why has system not been repaired?	How long was it broken?
Flow rate from system (L/m)	
Failure in last two weeks?	
Days out of service in last two weeks?	
Failure in last year?	
When did facility last fail?	
How long was it broken?	

**Table 7b. Functionality: sanitation and hygiene**

Facility	Community	Household
	Is community certified as ODF?	How are children's feces disposed of?
If not operational, why?	How are children's feces disposed of in this community?	Presence of excreta in house or yard area
Failure in last year?	Presence of excreta in community	Can respondent name key times for hand washing?
How long was it broken?	Hygiene promoter in community	
Does facility show signs of recent use?	Does promoter conduct regular hygiene promotion activities?	

#### 4. Reliability

Reliability indicators tell us about the frequency and predictability with which facilities are unavailable. This may be different from failure rates, since systems may become unavailable periodically because they are locked at certain times, or because they may experience periodic service interruptions that users consider normal, and do not report when asked about system failures. It is useful to measure reliability at the facility and household levels, since facility management teams may not be aware of some types of service interruptions, or may not be able to accurately assess user's experience of the predictability of these interruptions. The resulting reliability data can highlight quality improvement opportunities to improve service delivery and reduce reversion by users to unsafe practices during service interruptions.

**Table 8a. Reliability: water**

Facility	Household
Is water service continuous?	Is service continuous?
Hours per day of service	Hours per day of service
Days per week of service	Days per week of service
Months per year that water is available	Months per year that water is available
	Can users predict service availability?

**Table 8b. Reliability: sanitation and hygiene**

Facility	Household
Is sanitation service continuous?	Is service continuous?
Hours per day of service	
Days per week of service	
Failure in last year?	
How long was it out of service?	

## 5. Accessibility

Accessibility indicators tell us about users' ability to access WaSH services when the facilities are functional and open. Users may be unable to use WaSH facilities as much as they would like to due to long queue times, distances, or other factors that do not show up as service interruptions, but which nonetheless impact the benefits users receive from WaSH programs. This is a critical area for quality improvement that is easily missed when data are not collected at the household level.

**Table 9a. Accessibility: water**

Household
Is water on-plot?
GPS coordinates of primary water source
Round-trip time to collect water (min)
How many trips do all household members make to fetch water
Volume of primary container used to fetch water
Estimated daily household water use (L) if trips/day unknown
Water use for business, farm, or garden (Y/N)

**Table 9b. Reliability: sanitation and hygiene**

Household
Is sanitation on-plot?
GPS coordinates of primary sanitation facility
Round-trip time to sanitation facility (min)

## 6. Operational Sustainability

Operational sustainability indicators measure the factors that have been most strongly associated with sustained water point operation in the literature and in recent work by Hilton partners. These indicators are measured at the community level, since some of the strongest predictors of functionality are the community's willingness and ability to repair broken water points. This, in turn, may depend on the presence of an active WaSH committee with access to adequate funds, tools, spare parts, and training, as well as outside technical support. Since some communities may not keep detailed records, or may be inclined to give socially desirable responses when asked about the presence of an active WaSH committee (i.e. they may sometimes lie to save face), it is useful to collect multiple indicators of WaSH committee activity and water point financial sustainability to verify and cross-check survey responses. While the number of factors that can affect sustainability is limitless, we focus on a few key aspects of operational sustainability that can be modified and improved through quality improvement efforts if they are found to be limiting functionality. Such quality improvement efforts are critical to ensuring that users continue to benefit from safe water access over time.

**Table 10. Sustainability: water**

Community
Does community have a WaSH committee?
Does WaSH committee meet regularly?
When did WaSH committee meet last?
Photo of recent meeting records, if available
Number of water points WaSH committee manages
Who repairs water points in this community?
Has maintenance person/team been trained?
How long ago were they trained?
Number of people in community trained to repair water points?
Are spare parts available? (Y/N)
are tools for maintaining and repairing water points available? (Y/N)
Does maintenance person/team come when needed? (Y/N)
Maintenance person/team response time (d)
Who can maintenance person/team call if unable to repair water point?

Does support person/team come when needed? (Y/N)
How long ago was last visit from the support person/team? (d)
Is a water tariff collected? (Y/N)
How is tariff collected? (per trip/per payment period)
Tariff amount per trip/payment period? (USD)
Percentage of users paying for water
Does WaSH committee have maintenance funds? (Y/N)
Maintenance funds amount (USD)
Previous year water point revenue (USD)
Previous year water point expenses (USD)
Are financial records current? (Y/N)

## 7. Water Safety

While many different indicators are useful in measuring water safety, a few simple indicators can effectively quantify much of the health risk due to contamination of drinking water. It is essential to measure *E. coli* concentrations at the household level, as well as the source level, since microbiological contamination of drinking water frequently occurs during storage. However, it is less critical to measure arsenic and fluoride at the household level, since contamination of stored water by these chemicals is extremely rare, and household treatment to remove these contaminants is also very uncommon. Simple field-based and laboratory methods exist for measuring these water quality parameters, and several options will be described in the field manual. Detailed information about the safety of existing water points allows partners to conduct quality improvement activities, as needed, to remediate contaminated sources, while simultaneously exploring ways to better protect new systems from contamination.

**Table 11. Water safety**

Facility	Household
Concentration of E. coli (CFU/100 mL) in source water	Household water treatment use
Concentration of arsenic (ppb)	Treatment type
Concentration of fluoride (ppm)	Does respondent treat every day?
	Safe water storage use
	Concentration of E. coli (CFU/100 mL) in stored water

## 8. Equity

Equity indicators are important for tracking how effectively Hilton partners are reaching the poorest of the poor. By measuring several different wealth indicators, such as ownership of key possessions, home construction materials, land ownership, and employment, it is possible to create a wealth index that can be used to accurately compare the wealth of households. By contrast, direct questions about income and monetary assets have been shown to produce less reliable estimates of wealth.

**Table 12. Equity indicators**

Household
Has working bicycle
Has working motorbike
Has working car
Has animal-drawn cart
Has working mobile phone
Has working radio
Has working television
Has working refrigerator
Type of fuel used to cook
Floor material
Wall material

Roof material
Rent/own house
Land ownership (y/n)
Land ownership (hectares)
Livestock ownership
Bank account (y/n)
Primary occupation of highest-earner in the household
Has one or more able-bodied adults in household (y/n)
Does household pay for water?

### 9. Process Quality Indicators

Process indicators measure program inputs, as well as the quality of processes that organizations use to achieve project outcomes. These indicators can be useful in tracking organizational changes over time, and measuring the impact that these changes have on project outcomes, if any.

Table 13. Process indicators

Organization
Date the process indicator data were collected
Organization name
Project country
Organization type
Main organization type
Total number of country staff
Number of WaSH staff
Number of M & E staff
Number of WaSH M & E staff
Total country budget for last FY (USD)
WaSH country budget for last FY (USD)
M & E country budget for last FY (USD)

WaSH M & E country budget for last FY (USD)
Total Hilton funding in last FY (USD)
Water points constructed last year (number)
Sanitation facilities constructed last year (number)
Hygiene stations constructed last year (number)
Water points rehabilitated last year (number)
Latrines constructed by community members in program communities last year (number)
New safe water beneficiaries last year (number)
New sanitation beneficiaries last year (number)
New hygiene beneficiaries last year (number)
How are water beneficiaries calculated?
How are sanitation beneficiaries calculated?
How are hygiene beneficiaries calculated?

## 10. National standards and statistics

National standards and statistics are not indicators. However, these standards and statistics will be compiled for all countries in which Hilton-funded projects are implemented so that compliance rates with national standards can be calculated for each project. In addition, applicable international standards set by organizations such as the WHO may be compiled for comparison.

**Table 14. National standards and statistics**

National standards and statistics
Maximum <i>E. coli</i> concentration (CFU/100 mL)
Maximum arsenic concentration (mg/L)
Maximum fluoride concentration (mg/L)
Minimum water point flow rate (L/m)
Maximum number of users per water point
Maximum number of users per sanitation facility
Minimum water consumption (Liters/person/day)
Maximum allowable distance to water source (m)

## Next Steps

Between October 14 and December 1, 2013, partners will review and discuss these draft core indicators and offer comments on their suitability, feasibility, and completeness. In addition, by November 1, partners will receive access to a draft field manual describing how these data can be measured in the field, and will have the opportunity to offer comments and feedback on this manual as well. The comments and feedback of partners, as well as a limited number of outside advisors, will be integrated, summarized, and used to develop a final set of core WaSH MEL indicators, which will then be piloted by partners. The final set of core indicators will not be set in stone, and may be revised further based on the results of pilot-scale implementation. By tracking and analyzing the resulting pilot data, partners will be able to launch quality improvement projects right away, in collaboration with the Water Institute team. The Water Institute team will be available to support partners in launching these quality improvement projects themselves, as well as in collecting, storing, and analyzing the indicator data that make these improvements possible.

## Appendix I Definitions

Selected definitions are provided below. A more complete set of definitions will be included in the WaSH MEL field manual.

### 1. Service Continuity

- a. Continuous service means that facilities are operational at any time, day or night, that users might wish to access them. A continuously operational facility to which access is restricted during certain hours (e.g. a latrine or water source that is locked at night) is not considered to provide continuous service, even if the service disruption is not due to any technical problems.
- b. Service that is not continuous means that users cannot access the facility due to malfunction, closure, etc. A borehole that stops producing water for several hours each day after heavy pumping does not offer continuous service. However, a borehole that continues to produce water, but has long lines that prevent users from accessing it at certain times, would still be said to provide continuous service.

### 2. Operational Facility

- a. Water point: An operational water point is one with observable flow at the time of inspection.

- b. An operational sanitation facility is one that can be used for its intended purpose by a typical individual. If a facility shows signs of regular use (see below), it is considered operational. If it does not show signs of use, but the enumerator perceives that it could be used by a typical individual, it is also considered operational. If the facility is not in use and could not be easily used by a typical individual, it is not considered to be operational.

### **3. Operational Sustainability**

Continuous operation over time. Operational sustainability can have many determinants, including mechanical, hydrogeological, social, financial, and demographic factors. To the extent that relationships between these determinants and continuous operation are understood, changes in these factors may be seen as contributing to greater or lesser sustainability as well.

### **4. On-plot Facility**

An on-plot facility is defined as a facility within 50 meters of the entrance to the respondents dwelling that the respondent has the right to use at all times.