OBJECTIVE

As of April 2014, charity: water requires our partners to collect data that measures immediate outcomes of improved water service. This is part of a larger organizational objective to increase our knowledge and understanding of the effect individual water points have on the communities they serve.

We have selected five indicators to measure these outcomes, outlined below. These are linked to international guidelines and are appropriate for the majority of charity: water's WASH funding framework, which focuses on rural community water supply. Although there are hundreds of water indicators utilized throughout the WASH sector, we have chosen these indicators because they can be easily applied and evaluated across our global portfolio to assess basic levels of water service.

Measuring the performance of our work against these indicators enables us to improve accountability to our donors and beneficiaries. Below is an overview of these indicators, including some of their strengths and limitations:

Indicator 1: Whether the water source is improved or unimproved [1]
This helps us understand how we are affecting water coverage rates in an area. Although this indicator focuses only on the type of water hardware, it does not help us gather specific information on the actual quality of the water communities are drinking.

Indicator 2: Average number of daily water users at the water source
Understanding the number of users accessing water from water points we have funded enables us to assess whether the number of daily water users is in line with international and national standards. Although this figure can change throughout the life of a water point, it indicates how much regular usage the system receives and when the system might require repair. We cannot easily assess this figure at baseline, so this is most relevant for post-implementation visits.

Indicator 3: Average queuing time at the water source
Average wait time at the water point allows us to access a community's level of service and how much of users' time is spent at the water point. We are particularly interested in tracking the decrease in wait time that users often experience after moving from an unimproved to an improved source.

Indicator 4: Average round trip walking time for users from their home to the water source
This indicator measures the time and indicates the approximate distance users travel to collect water, taking account of variations in terrain that may add time. Given that this information is collected from interviews, we expect that it will not be perfectly accurate, nor uniform within every community.

Indicator 5: Average daily water collection per household member, in liters
Measuring average daily water collection per person helps us understand not only how much water users are potentially drinking, but also how much water they have available for other activities such as cooking, cleaning, and bathing. We intend to compare these values against international and national standards to ensure that communities are meeting their basic water needs. Like indicator 4, gathering information about daily water collection only from interviews means that the data collected against this indicator will not be perfectly accurate.

[1] Please see Annex 4 for definitions of improved and unimproved water sources from the Joint Monitoring Programme and their associated charity: water inventory types.

FUNDING

We ask that our partners include in proposed budgets the cost of conducting baseline and endline assessments according to charity: water's requirements. We prefer that this include contracting an external firm to conduct these surveys. These costs should be included under the relevant cost categories in our Budget and Expenditures Template.

METHODOLOGY

charity: water requires partners to report against our five key indicators at baseline and endline for all grants funding new and rehabilitated water points. For every water point selected to be surveyed, we require completion of the charity: water Household Water Source Information Survey, which should be applied to community water points only, **not to schools or health clinics**. The Household Water Source Information Survey consists of a Water Source Summary Information Survey [Annex 1] that captures identifying information about the water point and community (one per water point) and accompanying Household Questionnaires [Annex 2] (10 per water point). "Community" in this context is defined as the expected households the water point will serve (baseline) or is serving (endline).

Special GPS requirements
In order to verify responses about the amount of time it takes people to go from home to water source, we ask that partners provide GPS coordinates for all households surveyed. Accordingly, we ask that all enumerators have access to GPS devices to use during the survey.

With the consent of each person surveyed, enumerators take and record GPS coordinates of each household surveyed. charity: water will never publish or distribute this information externally. It will be used only for purposes of verifying survey data. Please inform charity: water in advance if you are unable to gather this information.

Scope of survey and sample size
UPDATED
Surveyed water points should be randomly selected from all water points in the grant. charity: water defines a water point as a water distribution point, such as a handpump or tap stand (even if a single stand has multiple taps).

The partner is required to survey 10% of water points in the given grant, with a minimum of 10 and maximum of 100 water points surveyed. For example, if a grant includes 70 water points, then 10% is 7 water points. However, 10 water points will be required to be surveyed to meet the minimum.

The same water points should be surveyed at both baseline and endline. If some proposed water points were unable to be completed in the grant, different randomly-selected water points of the same technology type can be substituted for endline data collection.

As the number of water points completed may differ from those proposed, it is up to the partner organization to manage how many sites are surveyed in order to meet the criteria above.

When to conduct the survey
Partners should conduct these surveys at baseline and endline:

- Baseline: The time period anytime before a water point has been installed or rehabilitated under a charity: water grant, generally before any hardware or software activities have begun.
- Endline: The time period after a water point has been installed or rehabilitated under a charity: water grant, after all implementation activities have been completed.

Household Sampling
Households included in each of the Baseline and Endline surveys should be randomly sampled using one of the methods detailed in step 2 below. Households at Baseline and Endline do not need to be the same household so long as they are surveyed from the same community and are using the same water source.

Language and enumerators
It is recommended that surveys be translated into the appropriate local language to ensure accuracy. This prevents the person completing the survey, the enumerator, from having to translate on the spot.

Enumerators should be unbiased to respondents and charity: water recommends that a third-party evaluator conduct the survey. The enumerator should also be able to communicate directly with the household water manager who collects the water with no cultural or language barriers.

As an example, in rural Sindh province, Pakistan, as in many other places, women generally manage water for the household. When conducting surveys there, it is most appropriate that the enumerator is a woman, as this would enable more comfortable communication. Additionally, the enumerator should be dressed appropriately according to local culture and able to communicate in Sindhi and Urdu.

Enumerators should also be trained in assessing the size and volume of typical water containers in the context of where they are working.

Survey format
charity: water can provide the survey to partners in one of two ways:

- Microsoft Word, to be printed out on paper. This will require the submission of data in an Excel spreadsheet template
- A digital survey collection platform that supports a .csv or .xls export. charity: water can also provide electronic data collection devices with pre-loaded surveys, as well as a brief training via Skype or telephone on use of the devices and surveys.

Partners must indicate the preferred format at the time of proposal so that charity: water can facilitate.

PROCESS

At both baseline and endline, the survey has four steps, detailed below.

Step 1: Collect basic community information using the Water Source Summary Information Survey

The objective of this step is to gather identifying information on the water point. Here we also collect data on two of our indicators:

- Indicator 1: Whether the water source is improved or unimproved
- Indicator 2: Average number of daily water users at the water source

This basic information may be supplied by the partner prior to conducting the survey.

Step 2: Select 10 households for survey

The objective of this step is to randomly select 10 households from the community to participate in the survey (either Baseline or Endline). Select an additional group of 5-10 households to visit in case the original selected households are unavailable or unwilling to participate. We ask that households be selected using one of two methods:

1. Randomly select from a list of households in the community, assigning a number to each household and asking someone to select 10 numbers or by using an online or Excel-based random number generator (for example: http://www.random.org/integers/)
2. Draw or download a map of the community and randomly select households.

On the Water Source Summary Information survey, we ask that the person conducting the survey describe how households were randomly selected.

Step 3: Survey the 10 randomly selected households using the Household Questionnaire.

The objective of this step is to complete 10 surveys of households served by a given water point, providing information on the remaining indicators. The survey can be completed in 15 minutes, and ideally the surveys for each water point can be finished within one day.

- Respondents should be each household's water manager—this is the person who collects water from the water point. If this person is unavailable, enumerators may speak to someone else in the household so long as they know and can describe the household's water collection behaviors.
- The enumerator, with the consent of the person being interviewed, should take GPS coordinates of the household and enter them on the survey in decimal format (e.g. 40.717277, -74.006810).
- If a respondent is unable to answer a question, mark "do not know" or "unable to answer"
- If it is not possible to visit the randomly selected household, then try to revisit them later in the day. If it is still not possible, then skip that survey, indicate that it was not possible to visit and survey one of the additional 5-10 households randomly selected as part of Step 2.

Step 4: Return information to charity: water

The objective of this step is to ensure the survey information is properly entered, saved, and transferred to charity: water in a timely and effective manner. Compiled baseline information must be submitted as an Excel document as part of the Q2/Midterm Report. Compiled endline information must be submitted as an Excel document as part of the grant's Completion Report.

If a paper survey is conducted, partners must enter the data into the Excel spreadsheet template and return it to charity: water by the corresponding report due date. If entering the information into Excel, please note the followings tips:

- **DO:** Please include a legend if there is any ambiguity in the entry fields or if they differ from the suggested number options provided in the template.
- **DO:** Please ensure the Community Name is spelled the same at Baseline and Endline, and that this spelling matches the Water Point List.
- **DO:** Include the corresponding charity: water Water Point ID (for example, ET.RST.2H.19.300.123) in the "CWID" column
- **DON'T:** There should be no spaces included after any text entry (i.e, "Community Name ").
- **DON'T:** There should be no header or organizing rows included in the spreadsheet (aside from Row 1). All rows should include viable data for analysis.
- **DON'T:** Please do not include any number ranges (i.e. Liters collected = 15-25L). If the respondent cannot provide a single answer, please include the mean (average) of the two numbers in the range (i.e. Liters collected = 20L).

If a paper survey is used, partners must also retain hard or soft copies of the summary page (1 per community) and each of household survey forms (10 per community) in their offices for up to 2 years post completion of the respective grant. These may be inspected as part of future in-country program audits.

UPDATED

If an electronic survey is used, partners must ensure that all data has been properly uploaded, exported, and shared with charity: water. The data set should be numerically coded in the same manner as the provided survey, and questions should be identical to those provided. Please still provide the charity: water ID and all of the same variables as those in the provided Excel template.

Special situations and exceptions

- For communities receiving more than one water point under a single charity: water grant, please collect information for 10 households served by each water point.
- If the primary water intervention is community level water treatment, not community level water access, the household survey should still be conducted.
- First time partners installing household taps or household level water treatment may conduct household surveys at 10% of households receiving household taps or filters under the grant instead of every tap or filter.
- As noted above, water points installed at schools and health clinics should be excluded from this survey.

ANNEX 1

Water Source Summary Information Survey and Instructions [paper or electronic data collection]

The goal of this survey is to determine the water sources for a randomly selected group of the population uses in communities where charity: water has funded a water point. Here "community" is defined as the group of expected households the water point will serve. The survey has four steps:

Step 1: Fill in Section 1: Basic Information on Community

Step 2: Randomly select 10 households for survey using one of two methodologies detailed in the Household Survey Guidance.

Step 3: Survey these 10 households

- The person completing the surveys should be unbiased personally and appear unbiased to the household respondent. We recommend an external evaluator complete this survey.
- The survey should be completed with the adult water manager of the household.
- The enumerator should be chosen with cultural, language, and gender sensitivity in mind.

Step 4: Input data and return all forms to charity: water.

Step 1: Basic Information on Community

1A	Community Name	
1B	Total number of households in community potentially served by charity: water source	
1C	Type of source to be installed installed (baseline) or installed (endline) with charity: water funding	
1D	Date water point was installed (endline only)	
1E	c:w Water Point ID (endline only)	

Step 2: Randomly select 10 households

To conduct the surveys, you will need to randomly select 10 households. Select 5-10 additional households in case some in the original group are unavailable or unwilling to participate. There are a number of ways to do this, including: 1) randomly select from list of total households in community or 2) draw or download a map of the community and randomly select households.

2A	Describe how you randomly selected the 10 households here	

Step 3: Conduct surveys

Using the survey form, conduct the 10 surveys. Each household should take approximately 15 minutes. In most communities, it will take approximately ½ day – 1 day to conduct the survey for each water point. If it is not possible to visit the randomly selected household, then try to revisit them later in the day. If it is still not possible, indicate that it was not possible and then take additional random households and visit them.

Step 4: Return information to charity: water

Enter the data into the Excel spreadsheet, as per the example Template. Information on all water points and communities can be consolidated into one Excel spreadsheet and should include:

1. Water Source Summary Information Survey fields (1 per community)
2. Household Questionnaire fields (10 per community)

This spreadsheet should be uploaded to Fluxx as part of Midterm (Baseline) and Completion (Endline) reporting.

ANNEX 2

Household Questionnaire [paper or electronic data collection]

Good morning / good afternoon. My name is _____. I represent _____and we are conducting research on your water source. The purpose of this study is to understand what source of water you use. Our team will interview approximately 10 households in this area. Your house has been randomly selected to participate in the study. If you are willing to participate, I will ask you questions about your drinking water. The interview will take less than 15 minutes. This survey is important to our efforts to provide clean water to this and other communities - are you willing to participate?

Identifying information

Household Number		

A	**Interviewer**	
B	**Date**	
C	**Time**	
D	**Community name**	
E	**c:w Water Point ID**	

Signature of enumerator obtaining consent	

E	**GPS coordinates of household** *(degrees decimal format only; with HH consent; note GPS coordinates will not be published or available to any third parties)*		

Survey questions

Q1	**Sex of respondent**	Male	**1**	Female	**0**

Q2	**How old are you?**		years
Q3	**How many people live in this household?**		people

Q4	**Can you give me a cup of your current drinking water?**				
yes	**1**	no	**0**	do not have	**99**

Q5	**[If the respondent answered YES to the last question] What source did this water come from? (Where answers are ambiguous, ask follow up questions to determine which source category applies)** **OR** **[If the respondent answered NO or DO NOT HAVE to the last question]: What is the <u>main</u> source of drinking-water for members of your household?**

	Piped water into home	**1**	Piped water into yard/plot	**2**	Public tap	**3**	Tubewell/borehole	**4**
	Protected dug well	**5**	Protected spring	**6**	Rainwater collection	**7**	Bottled water	**8**
	Unprotected dug well	**9**	Unprotected spring	**10**	Vendor water	**11**	Tanker truck water	**12**
	Surface water	**13**	Other (please write in):					

Q6	**Was water available at this [SOURCE] yesterday?**				
yes	**1**	no	**0**	do not know	**99**

Q7	**[PLEASE LEAVE Q7 BLANK AT BASELINE.]** **Is this water from [insert the name of the CHARITY: WATER SOURCE]?**				
yes	**1**	no	**[END]**	do not know	**99**

Q8	**How many minutes does it take you (or this household's primary water collector) to walk to the source of water this water came from? (one way trip) [ENTER 0 IF NO WALK]**		minutes
Q9	**How many minutes do you (or this household's primary water collector) normally wait in line at the source of water this water came from? [ENTER 0 IF DO NOT WAIT]**		minutes

Q10	**Do you store water at your household?**				
yes	**1**	No [END]	**0**	do not know [END]	**99**

Q11	**May I see your water container? If they present it, calculate and include here how many liters the water container can hold.** **If not, ask: "How many liters does your water collection container hold?"**		liters
Q12	**How many of these water containers did your household collect yesterday?**		water containers

Thank you very much for your time!

ANNEX 3

Sample Data Entry (Excel) [for use with paper data collection]

In this example, charity: water has funded the installation of a borehole. Alan Smith collected 10 surveys during one day of data collection on December 5, 2017. He interviewed 10 families (n=10), with 9 women respondents ranging from 18-51 years of age. The number of people per household ranged from 3 to 10. Nine of the 10 households gave a cup of water to drink (n=10). Of those 9 households (n=9), 5 of 9 that day were using the borehole installed with charity: water funding. The others were using rainwater collection, bottled water, a river source, and an unprotected spring. The walk for the charity; water source ranged from 14 to 30 minutes (n=5), and the wait at the source was 5 to 15 minutes (n=5). All of the people (n=5) who used the charity: water source stored water in 20 liter containers, and the people collected between 1 and 3 containers per day.

The columns in the Excel data submission sheet has the following columns:

- HOUSENUM
- INTERVIEWER
- DATE
- TIME
- LOCATION
- CWID
- HHLATITUDE
- HHLONGITUDE
- SEX
- AGE
- NUMPEOPLE
- CUPOFWATER
- SOURCE
- WATAVAIL
- CWSOURCE
- MINWALK
- MINWAIT
- STORE
- LITERS
- NUMCONTAINER

ANNEX 4

Detailed Definitions of Improved and Unimproved Water Sources

"Improved" sources of drinking water:

Category (JMP)	Definition (JMP)	charity: water Inventory
Piped water into dwelling	Defined as a water service pipe connected with in-house plumbing to one or more taps (also called a household connection) - e.g. in the kitchen and bathroom	**Piped-System:** **Household Connection** *Gravity Flow* *Motorized Pump* *Solar Powered Pump* *Household Connection*
Piped water to yard/plot	Defined as a piped water connection to a tap placed in the yard or plot outside the house (also called a yard connection)	**Piped-System:** **Household Connection** *Gravity Flow* *Motorized Pump* *Solar Powered Pump* *On-Plot HH Tap Stand*
Public tap or standpipe	A public water point from which people can collect water. A standpipe is also known as a public fountain or public tap. Public standpipes can have one or more taps and are typically made of brickwork, masonry or concrete	**Piped System: Tap Stand** *Gravity Flow* *Motorized Pump* *Solar Powered Pump* *Community Tap Stand* *Community Kiosk*

Tubewell or borehole	A deep hole that has been driven, bored, or drilled, with the purpose of reaching groundwater supplies. Boreholes/tubewells are constructed with casing or pipes, which prevent the small diameter hole from caving in and protects the water source from infiltration by run-off water. Water is delivered from a tubewell or borehole through a pump, which may be powered by human, animal, wind, electric, diesel or solar means. Boreholes/tubewells are usually protected by a platform around the well, which leads spilled water away from the borehole and prevents infiltration of run-off water at the well head.	**Manually-Drilled Well** (Tubewells) *Hand-augered or percussion drilled:* *Shallow tubewell with pump* *Deep tubewell with pump* *Manually drilled (hand augered) well with pump* **Drilled Well** (Boreholes) *Professionally drilled:* *Shallow or deep borehole with pump*
Protected dug well	A dug well that is protected from runoff water by a well lining or casing that is raised above ground level and a platform that diverts spilled water away from the well. A protected dug well is also covered, so that bird droppings and animals cannot fall into the well.	**Hand-Dug Well** *Hand-dug well with: Afridev pump, India Mark II or III pump, No. 6 pump, Elephant pump, etc*
Protected spring	The spring is typically protected from runoff, bird droppings and animals by a "spring box", which is constructed of brick, masonry, or concrete and is built around the spring so that water flows directly out of the box into a pipe or cistern, without being exposed to outside pollution.	**Spring Protection** *Spring Development* *Protected Spring* *On-spot Spring Protection*

Rainwater	Refers to rain that is collected or harvested from surfaces (by roof or ground catchment) and stored in a container, tank, or cistern until used.	**Rainwater Harvesting** *Rainwater Collection Tanks* *Rainwater Roof Catchments* *Rainwater Storage Jars*
***Please note that water filtration systems are not considered a source of drinking water. In this field please include where respondents fetch source water that is then treated in a filtration system.*		

"Unimproved" sources of drinking water:

Category (JMP)	Definition (JMP)
Unprotected spring	This is a spring that is subject to runoff, bird droppings, or the entry of animals. Unprotected springs typically do not have a "spring box."
Unprotected dug well	This is a dug well for which one of the following conditions is true: 1) the well is not protected from runoff water or 2) the well is not protected from bird droppings and animals. If at least one of these conditions is true, the well is unprotected.
Cart with small tank/drum	This refers to water sold by a provider who transports water into a community. The types of transportation used include donkey carts, motorized vehicles, and other means.
Tanker-truck	The water is trucked into a community and sold from the water truck.
Surface water	Water located above ground and includes rivers, dams, lakes, ponds, streams, canals, and irrigation channels
Bottled Water	Considered to be improved only when the household uses drinking water from an improved source for cooking and personal hygiene; where this information is not available, bottled water is classified on a case-by-case basis.