



charity: water MAP Framework Training Guide

TRAINING DATES

The 6-day training should be held in the weeks preceding planned data collection.

TRAINING ATTENDEES

- Enumerators (typically, charity: water recommends 6-10 enumerator)
 - One extra enumerator may be trained as alternates in case primary enumerators are unable to continue working in the future. This is optional.
- Supervisor(s) (recommended 1 supervisor per 4 enumerators)
 - These can be either hired temporary staff for this purpose, or partner staff serving in this role.
- Partner Monitoring & Evaluation staff
- WASH Technical advisors, other country office staff. This is optional.
- District or local government representatives. This is optional for first day only if the partner would find it helpful.
- Training Team from charity: water:
 - Monitoring & Evaluation team member
 - One or two additional support staff

charity: water recommends that the training be limited as much as possible to the enumerators, supervisors, and partner M&E staff. If government representatives are included, they should attend the first day only, unless there is a specific reason they should be included for longer. This is only if the partner thinks this would be helpful, but is not required by charity: water. Additional partner staff, such as WASH Advisors are also welcome at the training venue during Days 1-3. We prefer that the field days (Days 4-6) be limited to those who will most closely be performing the monitoring work (enumerators) or overseeing it (supervisors and/or M&E staff).

SCHEDULE

Prior to the training, charity: water will meet with the Supervisor(s) and relevant M&E staff to review the mobile phones or tablets, procured equipment, and review the training schedule.

The training includes three days in an office or training venue and three days of supervised field practice. Each office day is planned for 8 am – 5 pm, with an hour lunch break, and 15-minute coffee/tea breaks in mid-morning and mid-afternoon. For the days in the field, the time is recommended as 8 am – 5 pm, inclusive of driving to the pilot monitoring communities. Box/sack lunches should be provided for the entire team on these field days. These times can be altered to match whatever time schedule is most appropriate for the partner organization and local context.

After the enumerator training concludes, charity: water will conduct a meeting with the responsible partner M&E staff, and potentially the data collection supervisors.

The training agenda and required materials are listed below.

Training Schedule

Day	Location		Activities	Notes
Training Day 1	Training Venue	AM	<ul style="list-style-type: none"> • Introduction / background <ul style="list-style-type: none"> ○ Introductions to the team ○ Review training schedule ○ Review overall charity: water MAP Framework ○ Review roles and responsibilities • Introduction to Survey Tools <ul style="list-style-type: none"> ○ Review general survey skills ○ Introduction to mobile data collection 	Training from 8 AM – 5 PM
		PM	<ul style="list-style-type: none"> • Community survey <ul style="list-style-type: none"> ○ Review questions and operational definitions ○ Practice doing survey 	
Training Day 2	Training Venue	AM	<ul style="list-style-type: none"> • Water point survey <ul style="list-style-type: none"> ○ Review questions and operational definitions ○ Learn and practice water point observations 	Training from 8 AM – 5 PM
		PM	<ul style="list-style-type: none"> ○ Learn water sampling and <i>E. coli</i> testing procedures ○ Practice full water point survey 	
Training Day 3	Training Venue	AM	<ul style="list-style-type: none"> • Household survey <ul style="list-style-type: none"> ○ Learn and practice informed consent procedures ○ Review questions and operational definitions ○ Practice full household survey 	Training from 8 AM – 5 PM
		PM	<ul style="list-style-type: none"> • School survey (if applicable) <ul style="list-style-type: none"> ○ Review questions and operational definitions 	

Training Day 4	Field		Supervised Field Practice: <ul style="list-style-type: none"> • Focus on practicing community & water point surveys, including water testing <ul style="list-style-type: none"> ◦ Break up into teams to conduct practice surveys • Review and debrief questions and procedures 	Training from 8 AM – 5 PM
Training Day 5	Field		Supervised Field Practice: <ul style="list-style-type: none"> • Focus on practicing water point and household surveys • Read microbial test results from previous day • Review and debrief questions and procedures 	Training from 8 AM – 5 PM
Training Day 6	Field		Supervised Field Practice: <ul style="list-style-type: none"> • Focus on practicing all surveys • Review and debrief whole training week • Closing meeting 	Training from 8 AM – 5 PM
Supervisor Meeting	Partner Office	AM	Supervisor Meeting <ul style="list-style-type: none"> • Review data on mWater dashboard • Review team structure and data collection planning • Discuss data collection communication with charity: water (expected once per week) 	8 – 10 AM

LOGISTICS AND SUPPLIES FOR TRAINING

General Training Supplies

Item	Which Training Days Needed
On-site meals, water, and coffee/tea break items for all participants	Days 1-3
Projector	Days 1-3
Projector screen	Days 1-3
Flip chart with paper and markers	Days 1-3
<p>Paper copies of 3 survey forms in English. (Household survey, Community Survey, Water point survey. An additional School survey will be included if necessary.)</p> <p>Copies of enumerator reference sheets, printed and laminated (Water quality testing guide, Quick checklist, Water source types, Sanitation types, Hand pump types).</p> <p><i>NOTE: charity: water will provide all files to print 2 weeks before the training begins.</i></p>	Day 1
Notepads and pens (1 pad and 2 pens per participant)	Day 1
Plastic folders for all participants to hold all papers	Day 1
Phones or tablets with all software installed (see below for software instructions)	Day 1
Supply items for water quality testing (see list below)	Day 2
Assortment of 3-5 typical containers used for carrying water in the survey area. These will be used for practice estimating container volume. (Note: these do not need to be new.)	Day 3
Box/sack lunches and water	Days 4-6

Supply items for surveys and water quality testing

This covers the minimum amount required for training. Please note that additional supplies may be required to complete the full data collection.

Quantity	Item	Description
1 per enumerator	Mobile phone or tablet	For completing the surveys. Android operating system 4.3 or newer to be compatible with mWater software.
1 per enumerator	Power bank [optional]	For charging phones or tablets. [optional]
1 per enumerator	Backpack	For carrying all necessary supplies.
To be determined ahead of training	Compartment Bag Test (CBT) <i>E. coli</i> test kits	CBTs are sourced from Aquagenx, or other manufacturer if other test is used.
10 per enumerator	CBT Clips	Plastic clip for Compartment Bag Test (sourced from Aquagenx)
1 per pair of enumerators	Collapsible bucket	20-Liter size, for measuring flow rate at water points
1 per enumerator	Coolers	5-Liter size. This is for carrying samples.
1 per enumerator	Hand sanitizer	Bottle of sanitizer for disinfecting hands for sample collection. (We recommend one small bottle per enumerator and a large bottle to re-fill.)
1 per enumerator	Scissors	Small scissors for opening <i>E. coli</i> media
100	Plastic bags	These are for storing the <i>E. coli</i> samples during incubation. 3-Liter or larger, zip-top bags are best
10	Packaged bottled water	500-mL bottle for field blank samples
2 per enumerator	Permanent markers	For labeling sample bags
2 per enumerator	Dry erase markers	For signing laminated consent forms
1	Bleach	Bleach for decontamination of CBTs (1 liter bottle). Approximately 3-5% chlorine
100	Gloves	Latex or nitrile gloves (used for decontamination of CBT tests)
-	Incubator	Incubator(s) for CBT <i>E. coli</i> tests (20 L of incubator volume for every 8 enumerators). If 24-h average daily ambient temperature is >30C and low temperature is >25C, you do NOT need to purchase an incubator.

Software for the charity: water MAP Framework

All of these applications are free and can be used on Android phones or tablets. To download them, you can search for them in the Google Play Store.



mWater Surveyor

- This is the main application to conduct the surveys
- Please note that there are two mWater Apps, so make sure you download the "Surveyor" app
- <https://play.google.com/store/apps/details?id=co.mwater.clientapp&hl=en>



Barcode Scanner

- This is used to automatically scan barcodes used to track water samples for analysis.
- It is called Barcode Scanner by the ZXing Team.
- <https://play.google.com/store/apps/details?id=com.google.zxing.client.android>



GPS software

- There are many available GPS Apps. One simple one is called GPS Coordinates by Ketan Computers.
- This is used as a back-up in case mWater isn't able to capture the coordinates.
- <https://play.google.com/store/apps/details?id=com.ketancomputers.gps>



Random Number Generator

- There are many random number generator apps, but this is one that is simple to use.
- It is used for random household selection.
- It is called Random Number Generator by UX Apps
- <https://play.google.com/store/apps/details?id=ru.xapps.random>

Configuring phones or tablets for mWater

- Refer to the following website for current instructions on how to set up mWater on a phone or tablet:
- <https://www.mwater.co/android-set-up-for-mwater.html>

User Accounts for mWater

- For the survey, each enumerator and supervisor will need an account to log into mWater. It is best if they each have their own unique account.
- mWater accounts are free, and can be set up by going to the mWater Portal at: <https://portal.mwater.co/>
- charity: water recommends that the partner establish a set of accounts with similar names and passwords, so they can be used again. For example:
 - [Partner]01
 - [Partner]02
 - [Partner]03
 - etc.
- Please create these names before the MAP Training begins, and send charity: water the account user names.
- Please note that each user account must be associated with a different email address. A trick to make mWater *think* there is a different email address when it actually references the same gmail address is to put a “+” at the end.
 - For example, [Partner]+01@gmail.com and [Partner]+02@gmail.com will all send mail to [Partner]@gmail.com

Checklist for partners: Are we ready for MAP training?

- ☐ Sample size calculated and communities selected. charity: water will support selection. For Baseline, partner should provide up-to-date site list with community names for the charity: water supported grant.
- ☐ All necessary enumerators, alternate(s), and supervisor(s) recruited or identified
- ☐ All supplies on the supply lists procured (see above)
- ☐ All mobile phones/tablets procured, tested, and loaded with SIM cards (if needed), and software. Please see pages above for details about software
 - mWater mobile data collection software
 - Barcode scanner App (ZXing Barcode scanner or other)
 - GPS App
 - Random Number Generator App (UX Apps or other)
- ☐ mWater user names created and shared with charity: water
- ☐ All surveys translated into local language(s) and sent to charity: water (if needed)
- ☐ Suitable training facility reserved for first 3 days of training
- ☐ Meals and/or accommodations arranged for all training participants
- ☐ High-quality professional translation arranged for all days of training
- ☐ Transportation to the field arranged for all training participants (including training staff) for Days 4-6 of the training
- ☐ Minimum three pilot communities identified and permission obtained to visit these communities for monitoring during Days 4-6 of training. If possible, communities should have at least 2 water points of different types and be located within a 60-minute drive of the training location.