



Peace Corps

Peace Corps Small Grants Program

Well Project Requirements and Considerations

Peace Corps requires water quality testing for all well projects. However, since wells can make large volumes of groundwater available to populations, certain considerations should be undertaken before designing and implementing these projects.

Minimum Requirements:

- A Water Quality Assurance Plan needs to be developed that outlines community ownership and responsibility for the life of the well. This needs to be attached to the project in PCGO. See Water Provision Projects section of “Projects Requiring Special Consideration” within the Small Grants Handbooks.
- Well water must be tested at the beginning of the project and then on a quarterly basis for a year for fecal coliforms, and arsenic. All efforts should be made to treat the water to make it meet minimum target levels (as outlined in WQAP).
- IF, the water is to be used solely for agricultural purposes, it must also:
 - be clearly and permanently labeled with signs explaining in the local language that the water is for agricultural purposes and not for human consumption, e.g. “Not for drinking water, for irrigation only.”
 - be clearly documented in the WQAP which parties in the community will be responsible for ensuring the water remains used for agricultural purposes for the life of the well.

It is *strongly* recommended that:

- Water tests are conducted for additional contaminants, including but not limited to: nitrates, nitrites, and other heavy metals
- Efforts be made to cement the well all the way down to the water level to help reduce possible contamination
- Efforts be made to cover, and if possible lock, the well when not in use
- Efforts should be made to arrange periodic testing of the water for the lifetime of the well
- Considerations are made regarding well location and preventing potential contamination (see separate sections below)

As part of the project planning, the Volunteer and Community Counterpart should:

- Inform the Peace Corps CD and APCD/PM that you are planning a well project.
- Determine, to the best of ability, that the water source will not be depleted with increased extraction of water. Work with the community to ensure they have the capacity to monitor any abnormal changes in water levels and know appropriate corrective actions. Document this monitoring responsibility in the WQAP.
- Work to equip a community member(s) to be the ultimate caretakers of the system and empowered to lead corrective action by the community, if necessary.
- Identify a qualified individual who will serve as “technical adviser” for the project. Posts may have the ability to connect with technical WASH expertise at USAID Missions. Other NGOs or development agencies may also have valuable resources related to local water quality and access. Volunteers should inquire about this to Peace Corps post staff.

- Consider maintenance costs that will be required to keep the well-functioning safely. Determine a community plan to cover these costs and document it in the WQAP. This could include, but is not limited to: working with a water users' association to build a mechanism for paying future maintenance costs into the project design (e.g., usage fees or a portion of the profits in case of a garden project)
- Include the initial and quarterly water quality test costs in the small grant project budget; however, ensure the community has plans and resources to conduct periodic water quality testing during the lifetime of the well
- Review potential problems listed in the [ENCAP Visual Field Guide: Water Supply](#) document when placing the well and consult the [Global Environmental Management Support Guidelines website](#) for further best practices for water supply projects. Consider these issues in the environmental review section of the project proposal.

Well location:

- For siting wells it is important to locate the well at the highest point on the property if possible.
- Avoid positioning down slope from potential sources of contamination, including surface water flows and flooding conditions
- Locate the well in an accessible site for maintenance
- Define a sanitary protective area around the wellhead that is kept in its natural state

Potential contamination:

- Yield and quality of water supply will depend on soil type (which determines filtering capability and transmissivity)
- Coarse gravel, limestone, and disintegrated rock can allow contaminants to travel quickly with little opportunity for natural purification

Potential Impact/Contamination	Mitigation Measures
<ul style="list-style-type: none"> • Provide water contaminated with nutrients and bacteria from animal waste • Create pools of stagnant water • Change groundwater flow • Create saltwater intrusions • Deplete aquifer (groundwater) • Cause land subsidence (impact from many wells) 	<ul style="list-style-type: none"> • Don't let animals graze or be watered up-gradient from wellhead • Monitor and repair leaks from cracked containment structures, broken pipes, faulty valves and similar structures • On islands and coastal areas, keep withdrawals within safe yield limits to avoid overdrawing, possible salt water intrusion and contamination of the well • Put in place a system for regulating use, such as a local warden or appropriate pricing • Include a focus on proper use and maintenance of the improvement as part of the behavior change and education program • Monitor water levels

As part of the project implementation, the Volunteer and Community Counterpart should:

- Conduct an effective training with the community on sustainable use and maintenance of wells. The training should also outline the health and safety risks of drinking potentially contaminated water and the Volunteer should discuss the problems outlined in the ENCAP Visual Field Guide: Water Supply document.
- Empower community members to ensure that the water remains used for the life of the well as the initial project intended.
- Test the well for fecal coliforms and arsenic at the beginning of the project and on a quarterly basis for a year. Arrange for periodic follow-up testing. The community should commit to this and it should be explained in the grant application under "sustainability" as well as in the WQAP.