

Project Rainkeep Cistern Restoration Guidelines

The following have been found, through examination of ancient cisterns, and interviews and experience, to be important. In addition, knowledge and experience are important qualifications for anyone supervising a cistern restoration.

1. Sweat Equity--Family willingness to contribute their labor, as established in intake interview. Those unwilling or unable to work on restoration may be a poor bet for future management, cleaning, and maintenance of a restored cistern.

2. A clear picture of the family's water needs and water use patterns regarding municipal water, purchased tank water, and rainwater. as established in intake interview. What expectations does the rainkeep Project have about how a successful cistern repair will affect this pattern?

3. A clear picture of the family's economic situation, including the number of household members and their earning status, as established in intake interview. In general, a widowed mother or grandmother will never have the income possibilities of an employed male, or even an unemployed male, although she may have as many children depending on her.

4. A water collection area that is clean or can be made clean, whether on the ground or on the roof, as established in intake interview and inspection.

5. Clarity about the family's perception of what their cistern requires to function successfully for rainwater collection and storage, and respect for this perception.

6. Clear identification of the existing, functioning elements of the family's cistern, and good integration of these elements into the restoration plan, to avoid destruction of sturdy, beautiful, and successful cistern parts, and to avoid the expense of unnecessary duplication.

7. Elements of a functioning cistern:

- A. Intact water storage container, no cracks or leaks
- B. Sufficient clean or cleanable water collection area, on ground or roof of house.
- C. Settling basin outside intake hole, to allow settling of some impurities
- D. Screen over intake hole, to keep out some impurities
- E. Intake hole, which can be entirely blocked when water is not flowing in, to keep out impurities
- F. Rim which entirely encloses cistern opening, to prevent entrance of birds, snakes, rodents, garbage, dirt, etc.
- G. Hinged child safety door, comprising
 1. larger door big enough to cover opening in rim (usually 50-70 cm. each way) to be opened for cleaning or for very large water buckets, and
 2. smaller door (approximately 35-40 cm. each way), to be opened for drawing water